



"New Zealand Star"

Harland + Wolff

933/4

Bulkhead + Framing profile

(2)

1/BEX

933

Imperial Star

'IMPERIAL STAR'



Bel 11436

PLANS TRANSFERRED

'NEW ZEALAND STAR'

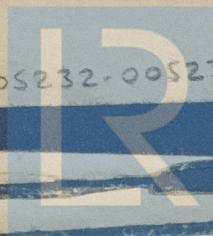
TO SISTER VESSEL

934

"New Zealand Star"

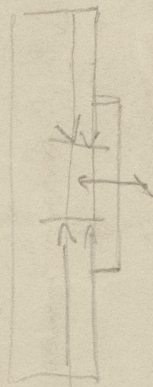
005232-005238-0135

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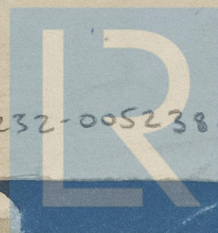
Lloyd's Register
Foundation

4) ¹³514
129



005232-005238-0135

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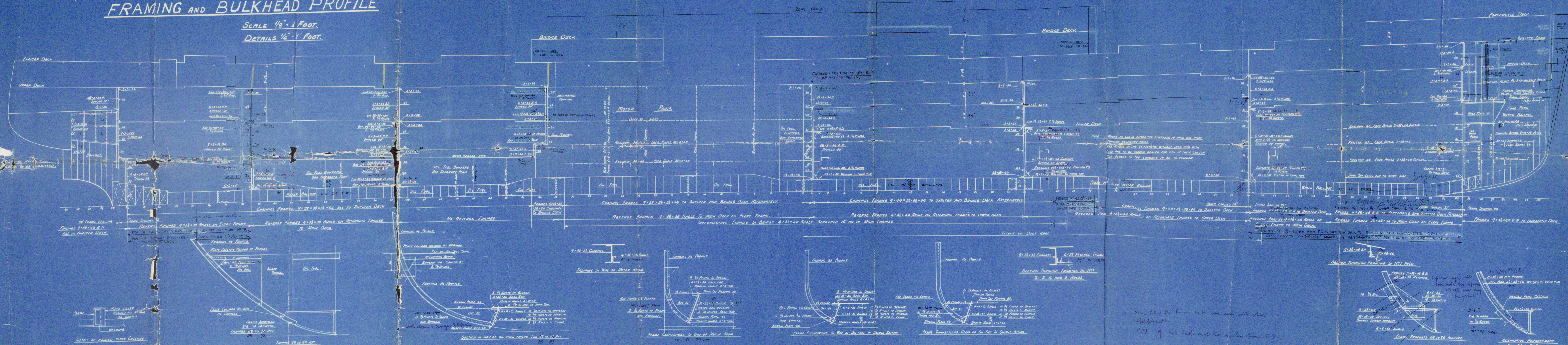
Lloyd's Register
Foundation

Nos 933-934

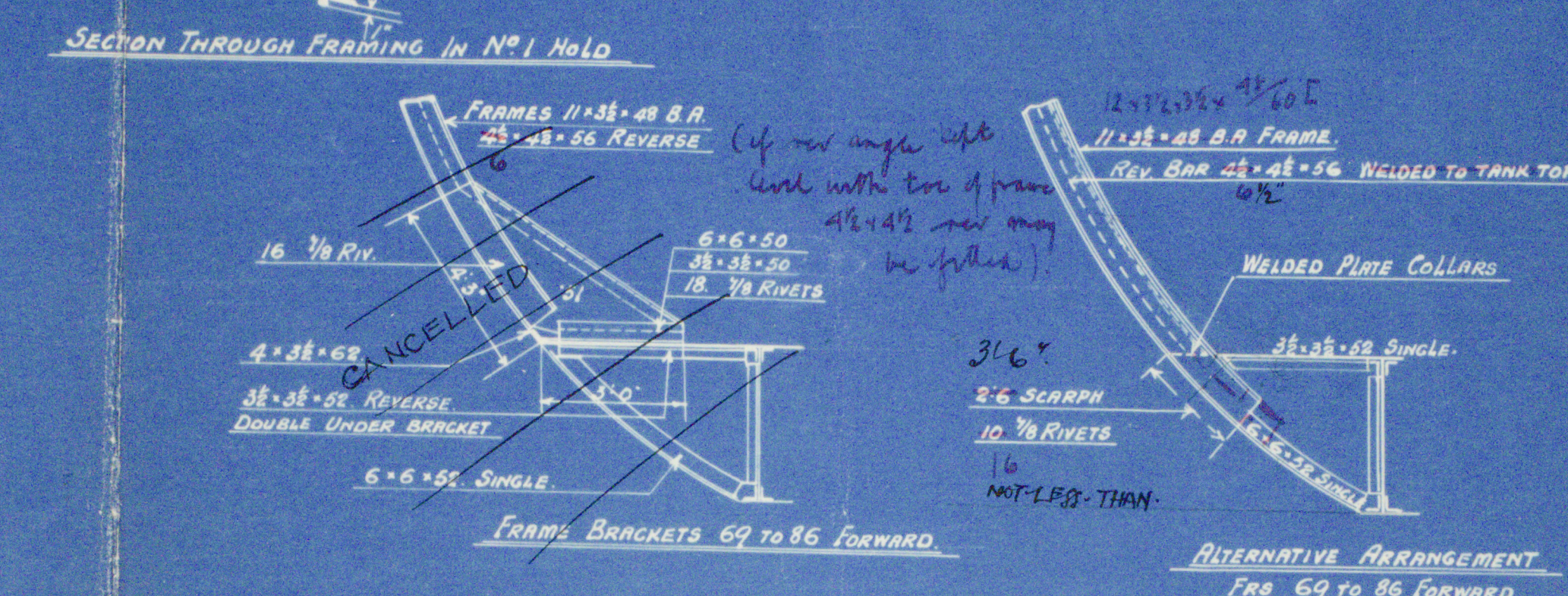
FRAMING AND BULKHEAD PROFILE

SCALE 1/8" = 1 FOOT.

DETAILS 1/4" = 1 FOOT.

NOTE: MODIFICATIONS IN BLACK
ARE FOR SHIP AS BUILT.

See 20, the rule is to be complied with when applicable.
P.P.P. of Oil Fuel not to be less than 150°F



102

Harland & Wolff

93314 Rep No Bel 11436.



M/S IMPERIAL STAR

M/S NEW ZEALAND STAR

Deck house PLANS TRANSFERRED
TO SISTER VESSEL

42

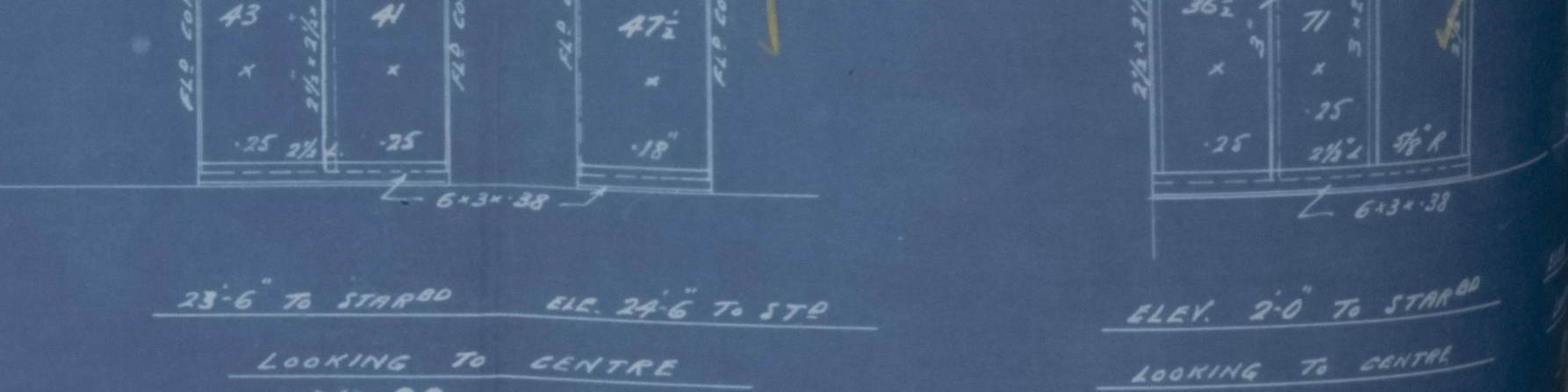
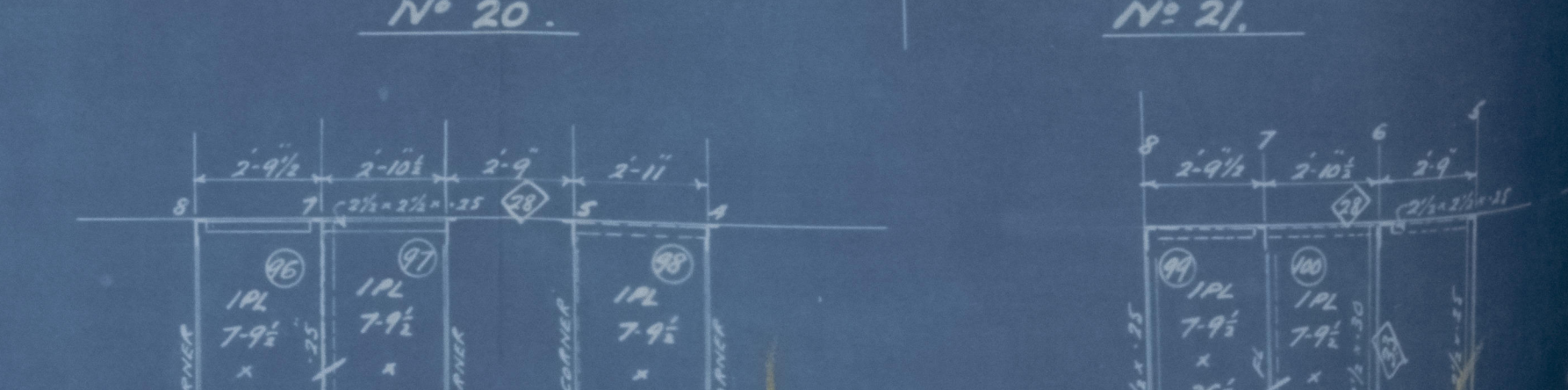
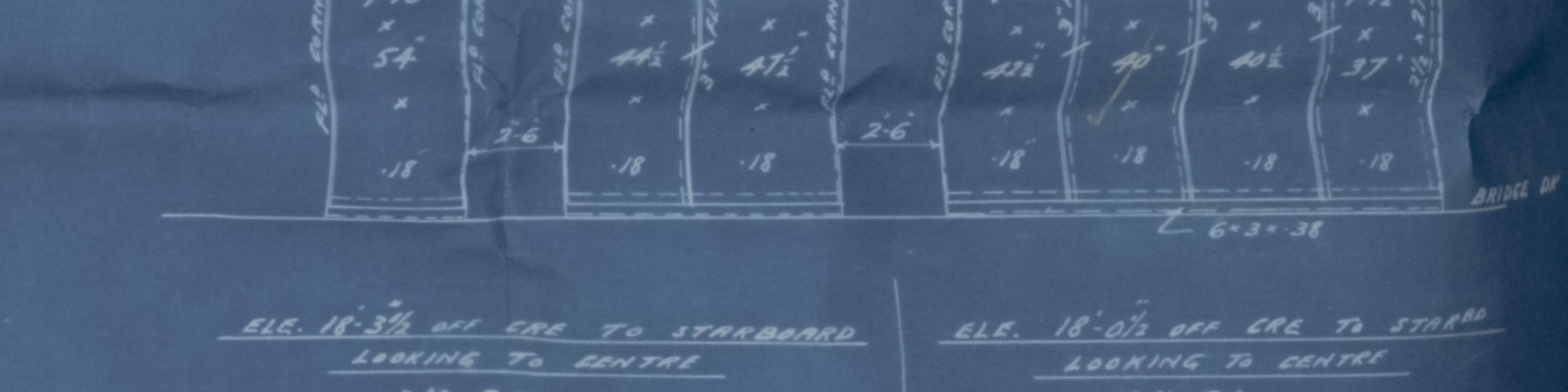
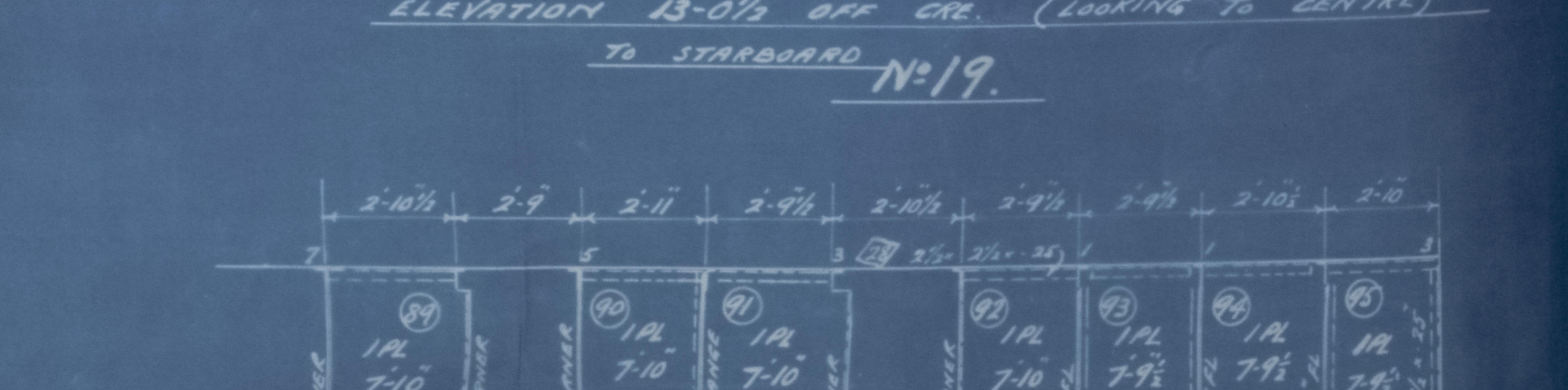
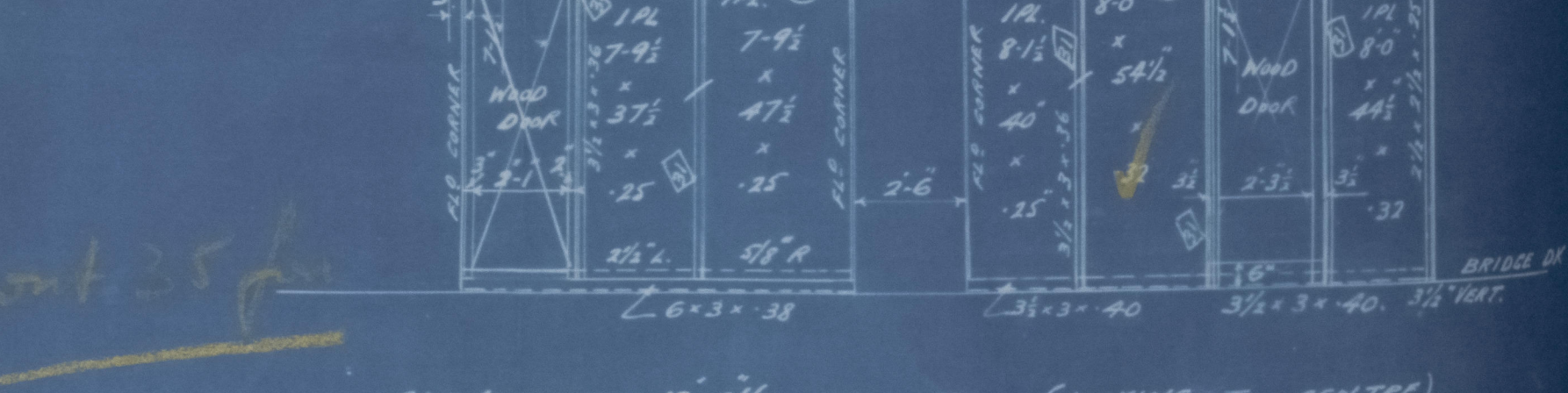
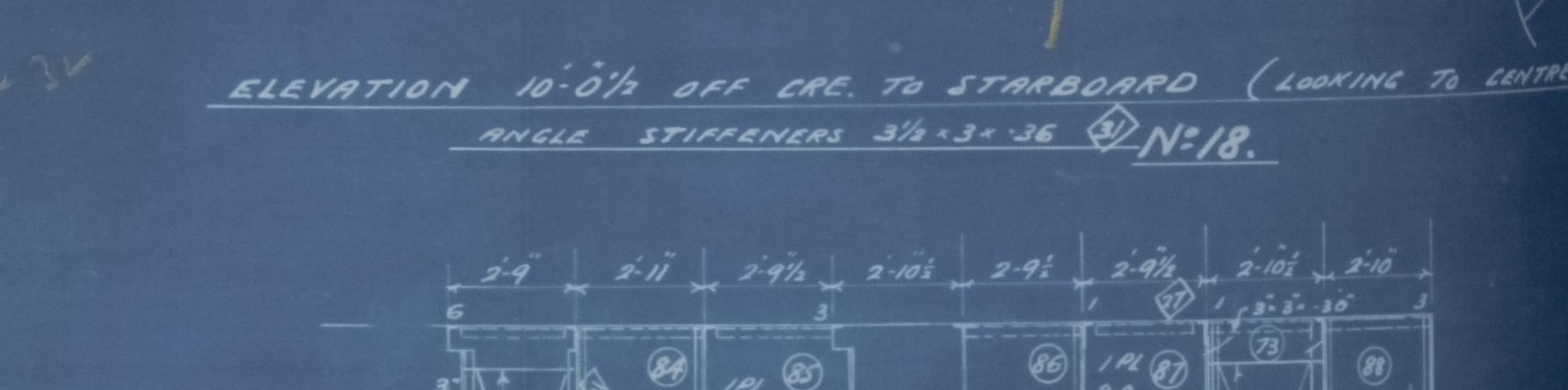
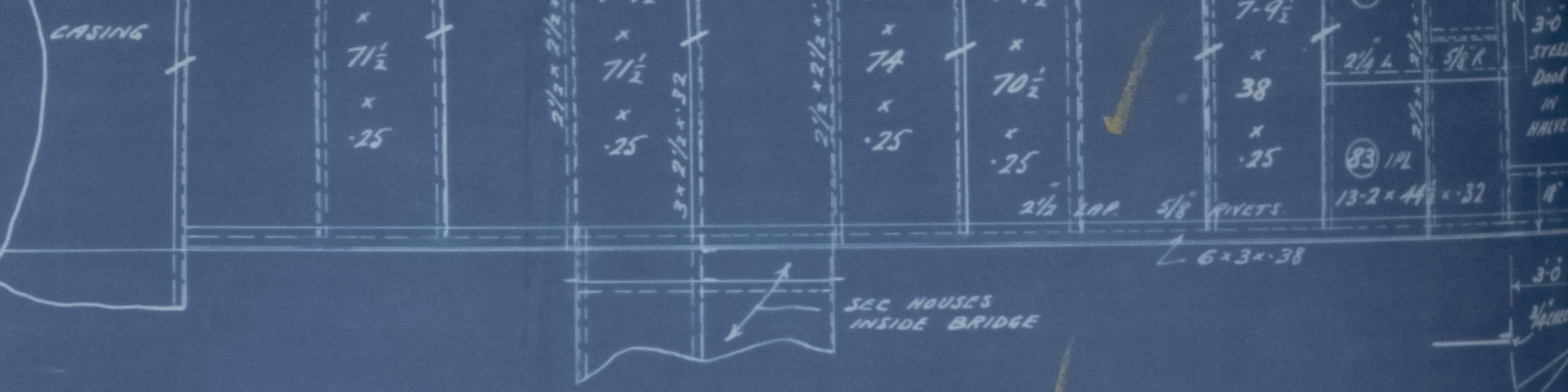
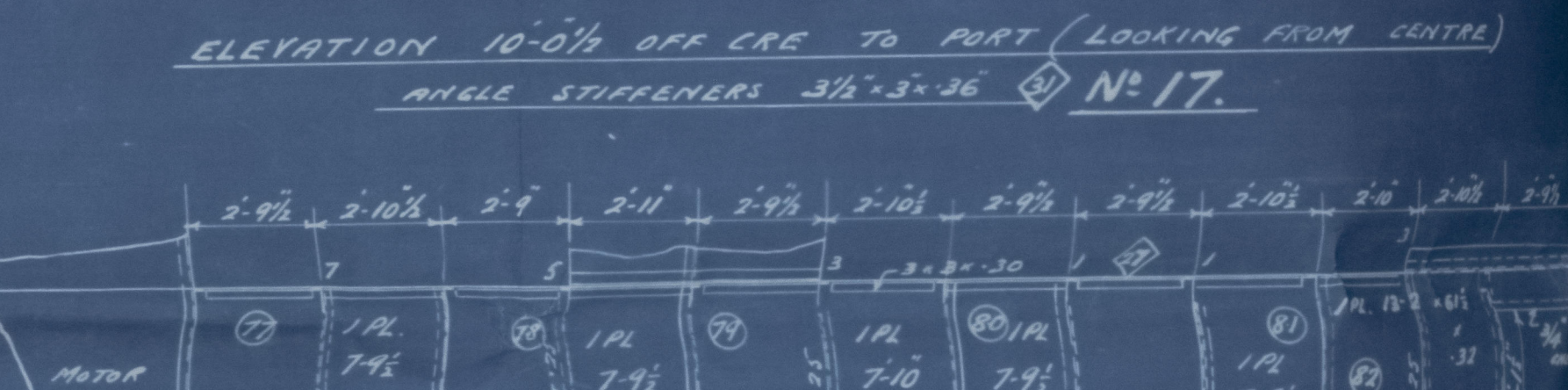
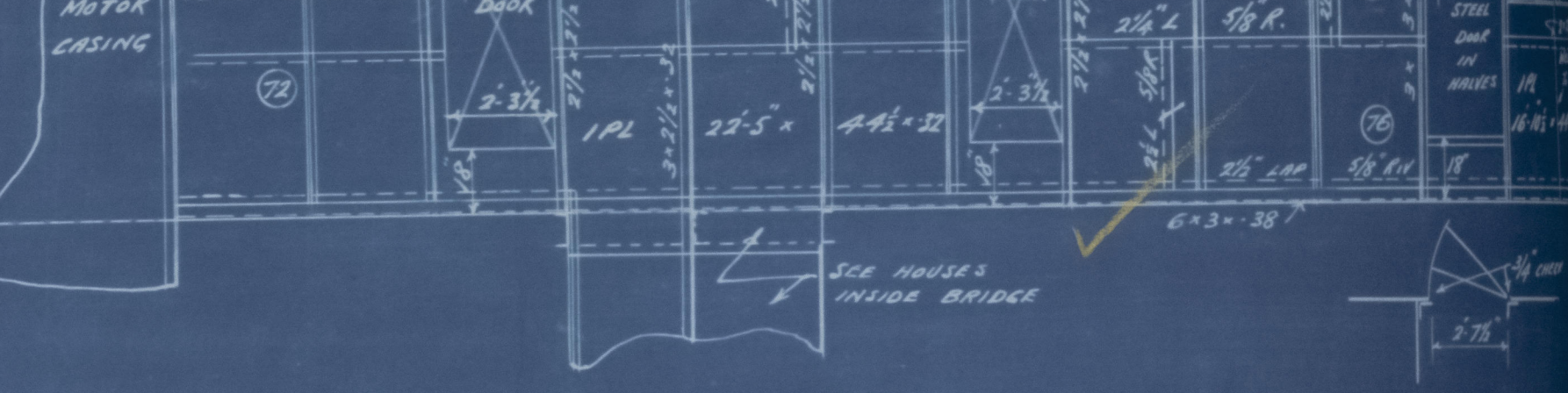
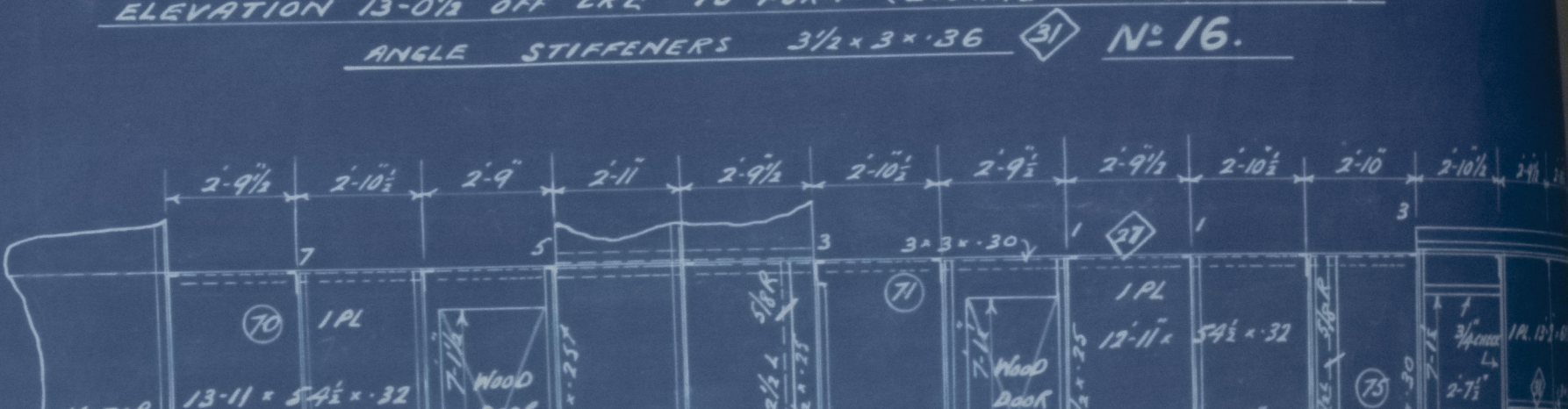
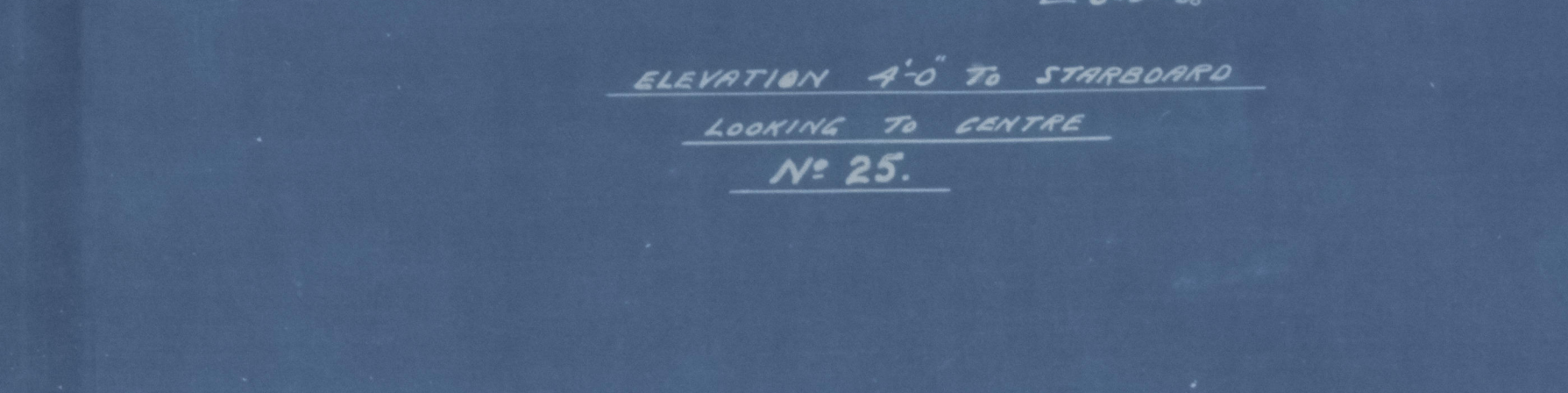
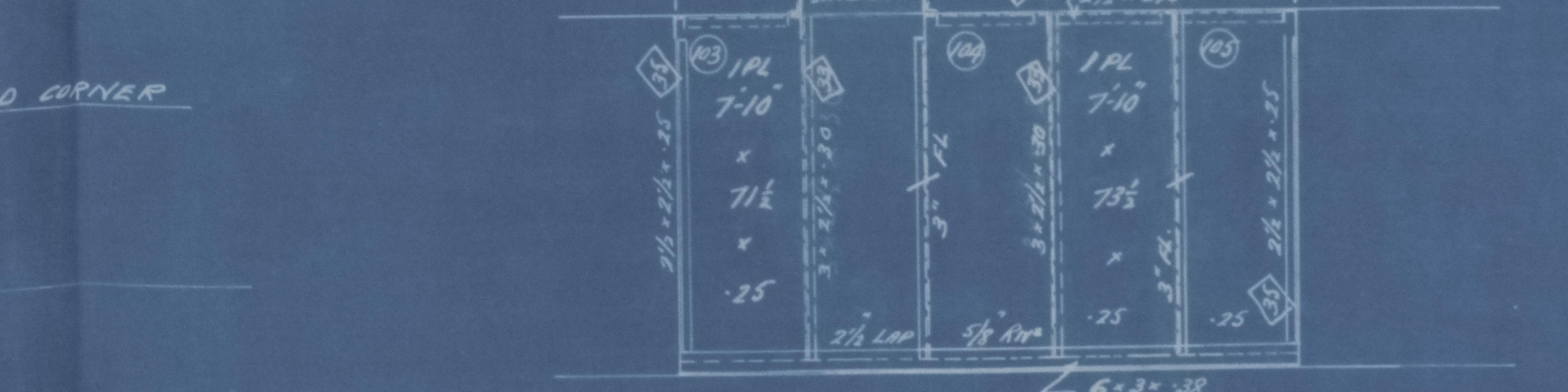
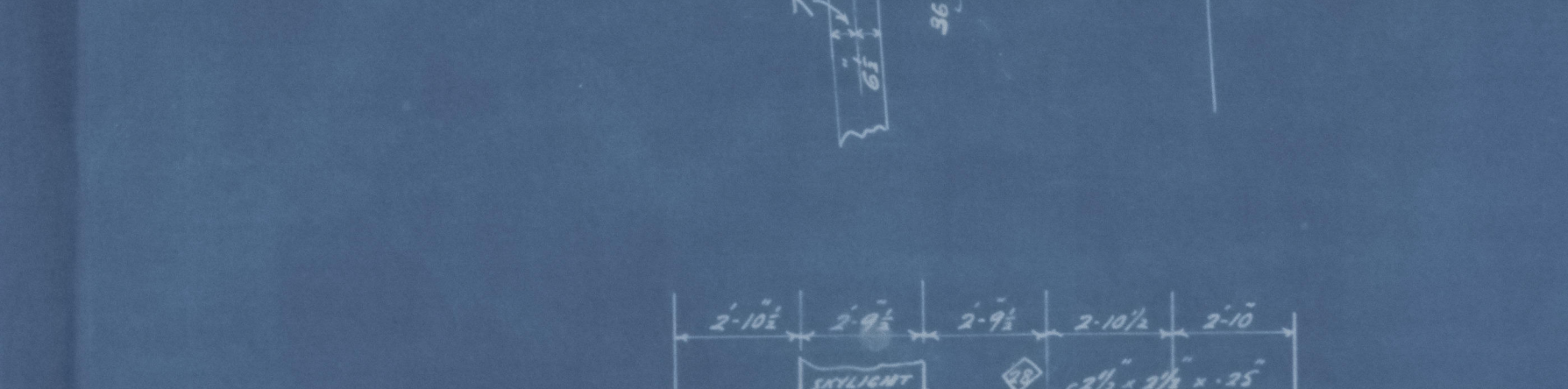
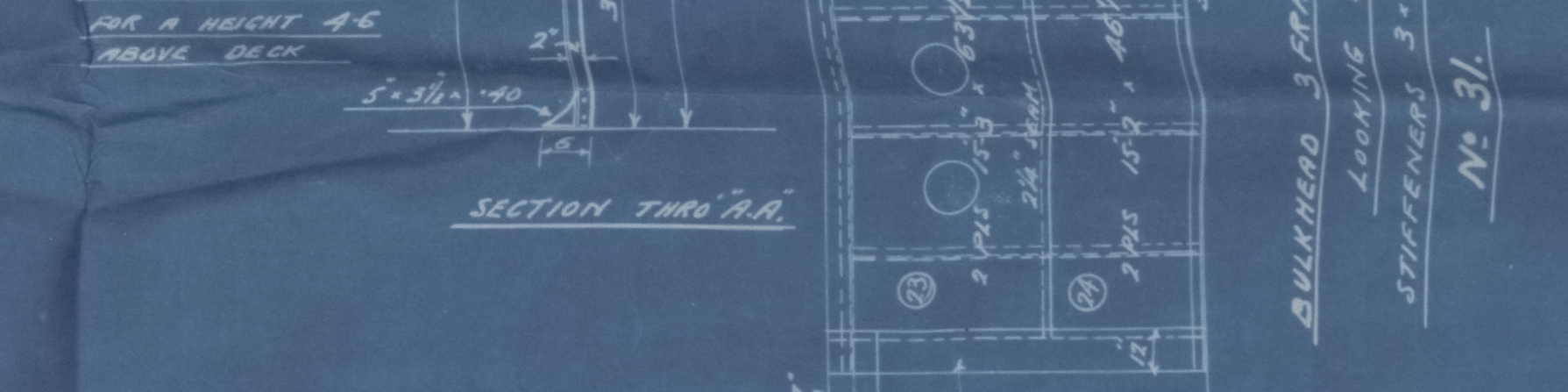
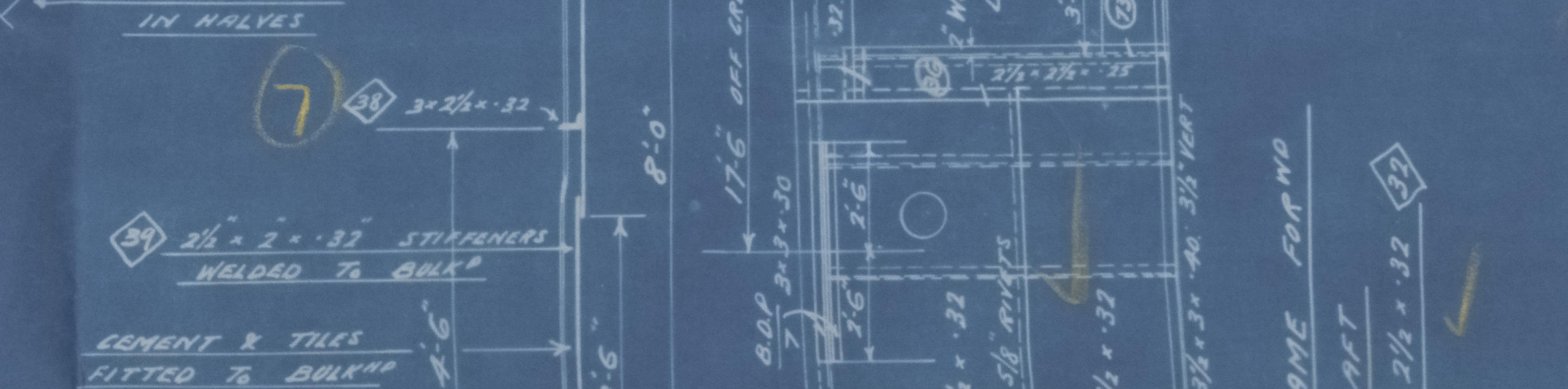
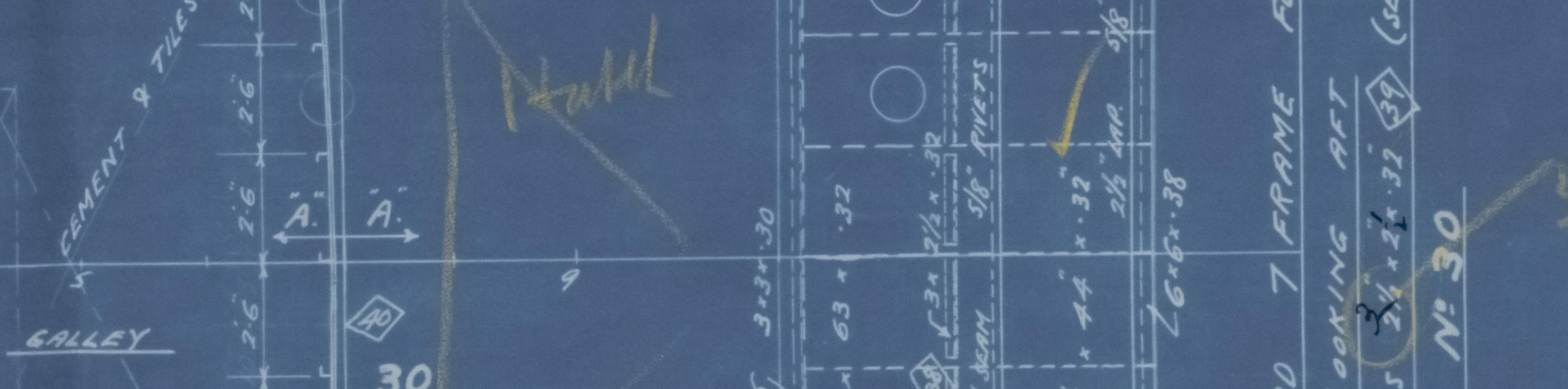
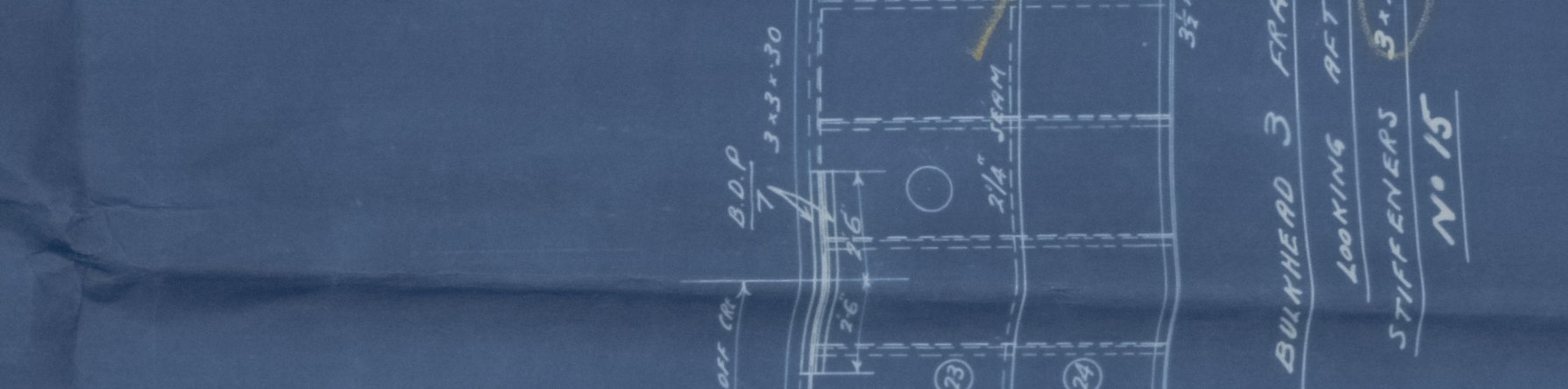
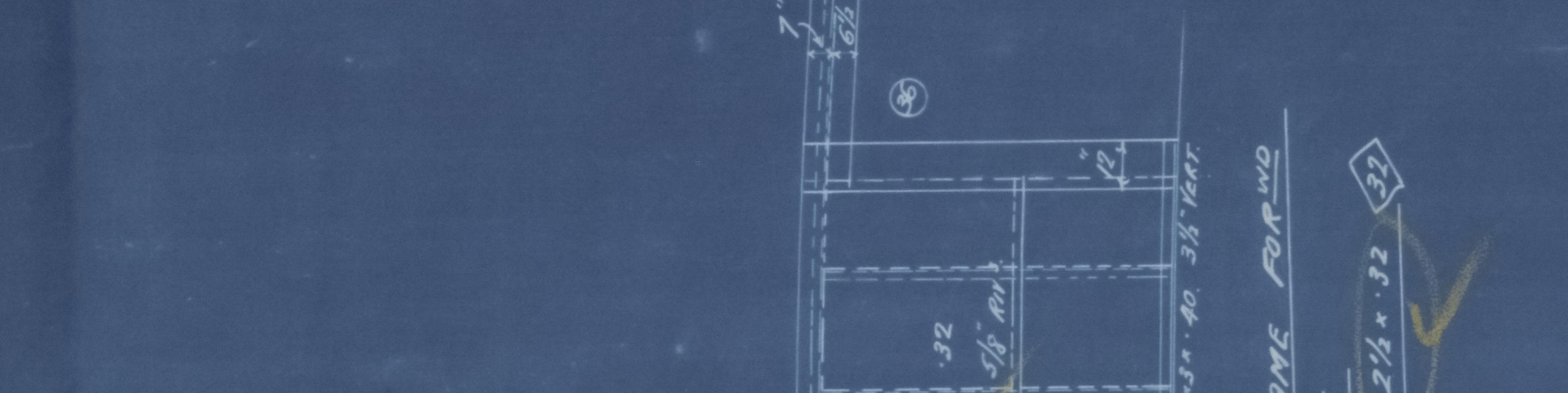
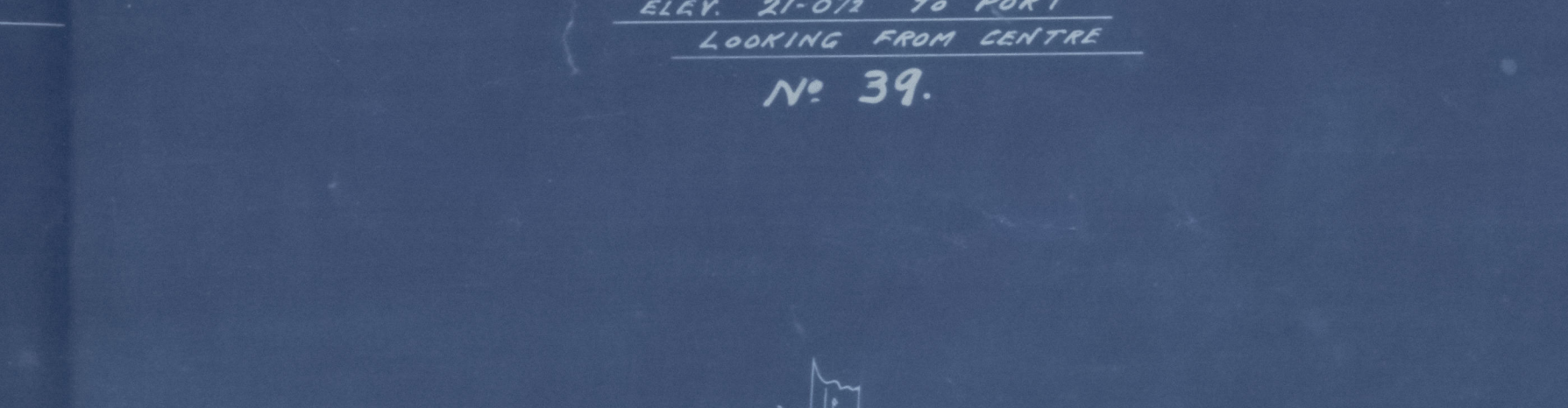
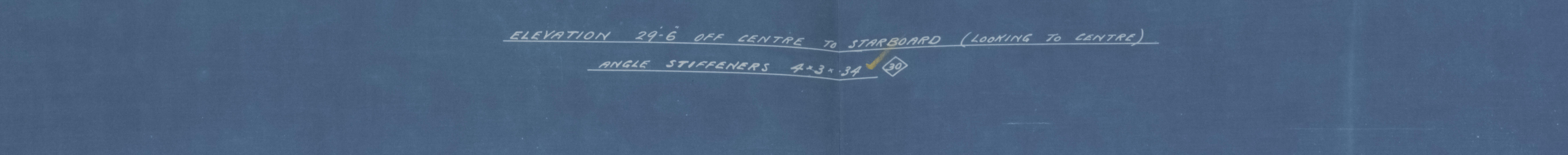
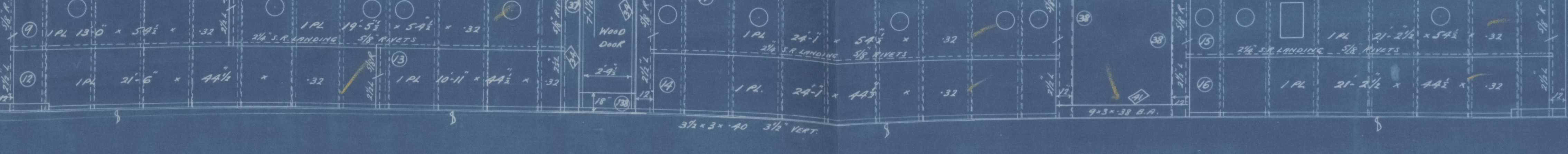
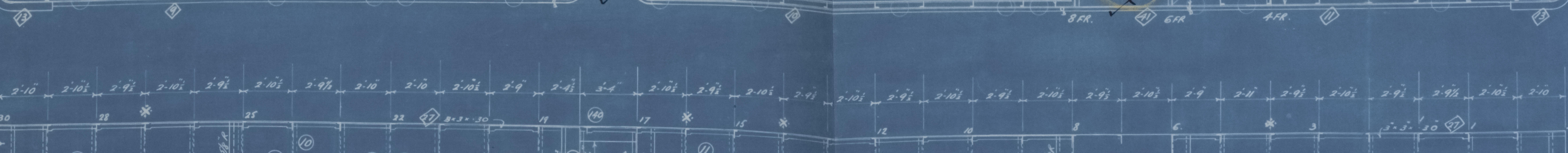
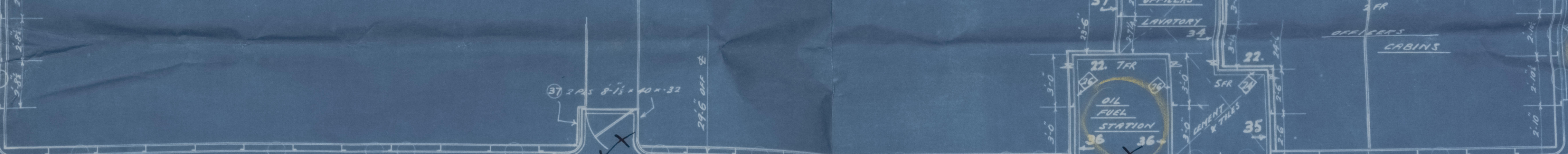
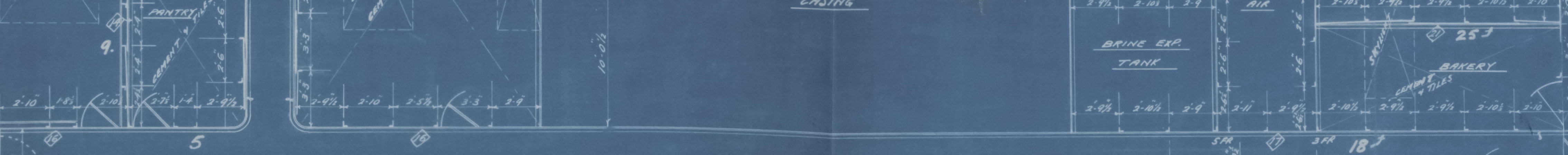
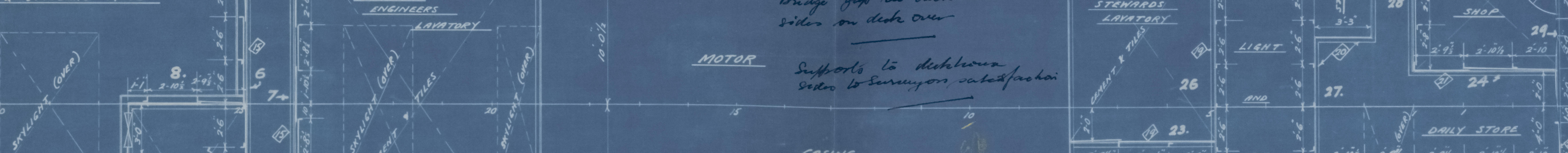
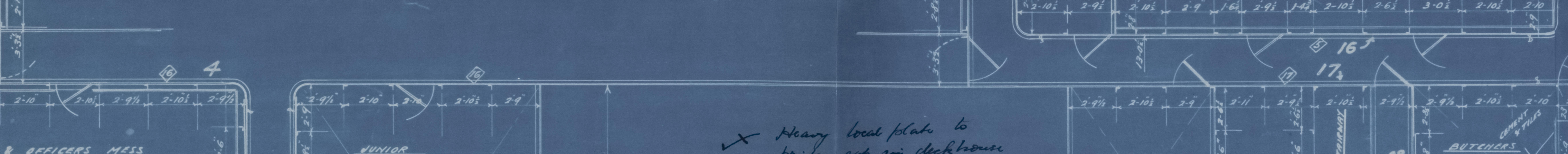
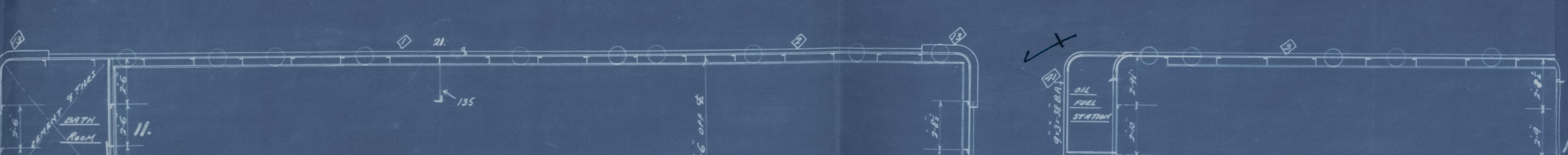
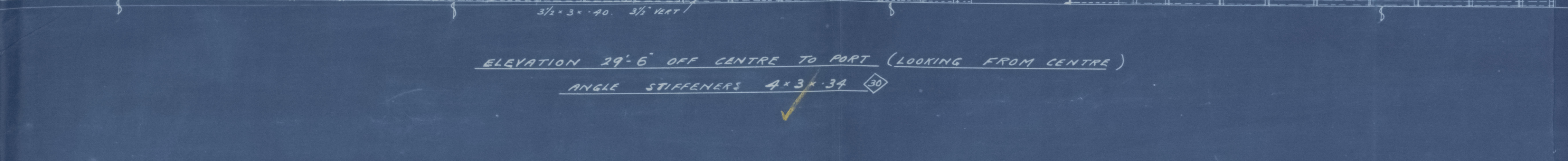
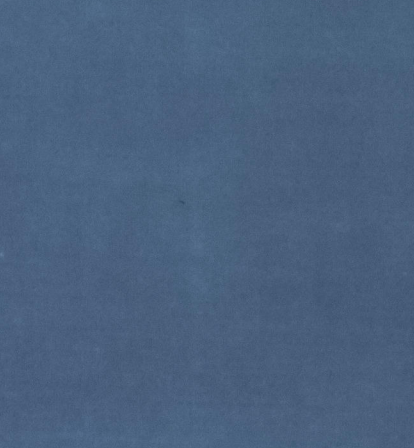
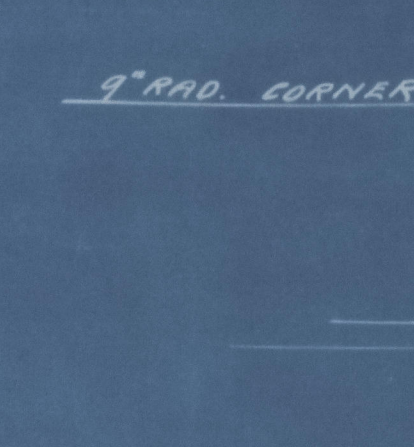
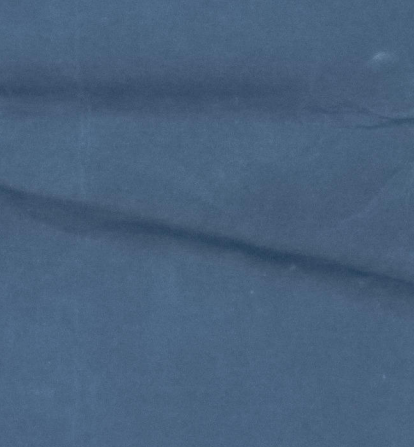
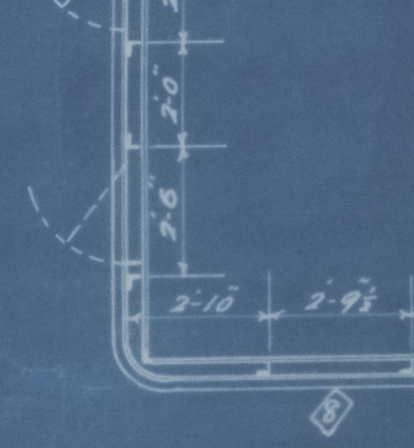
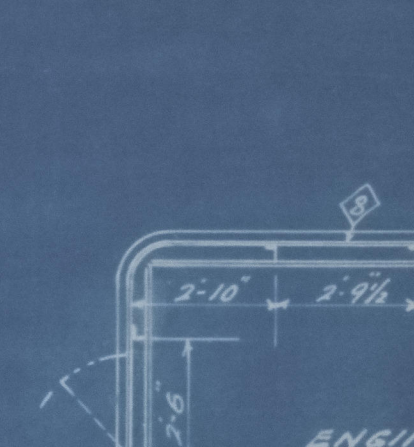
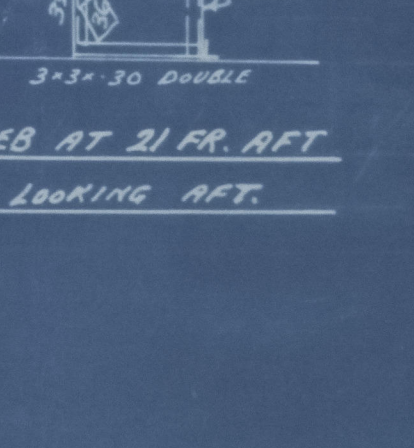
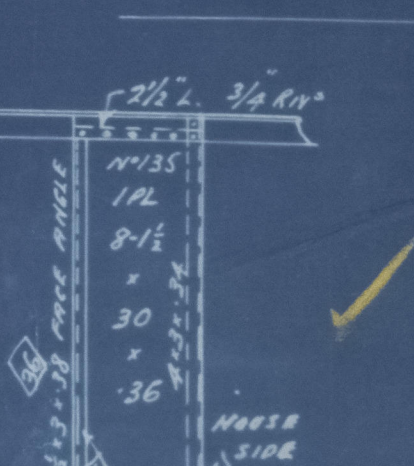
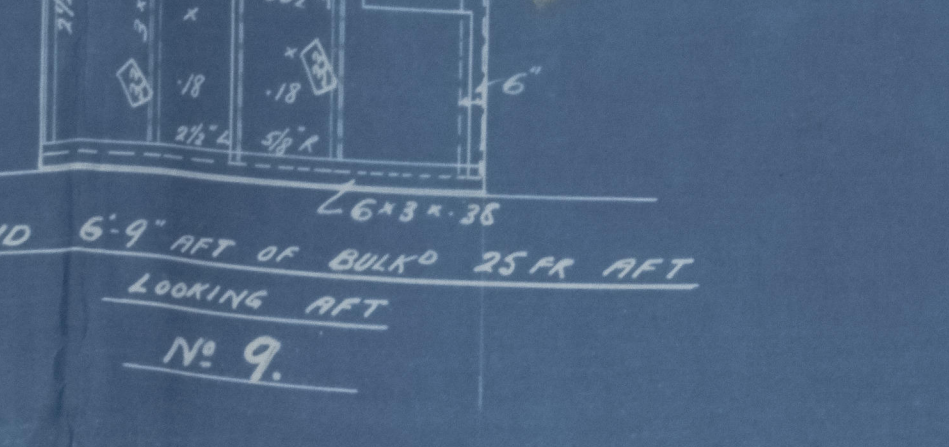
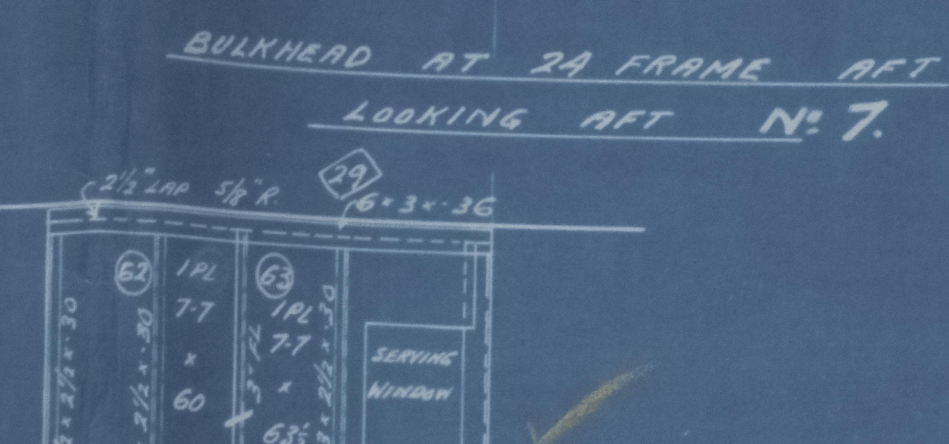
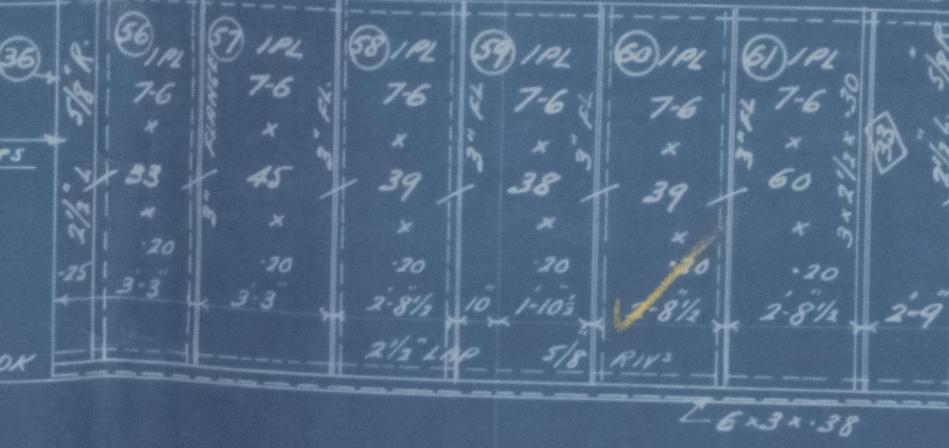
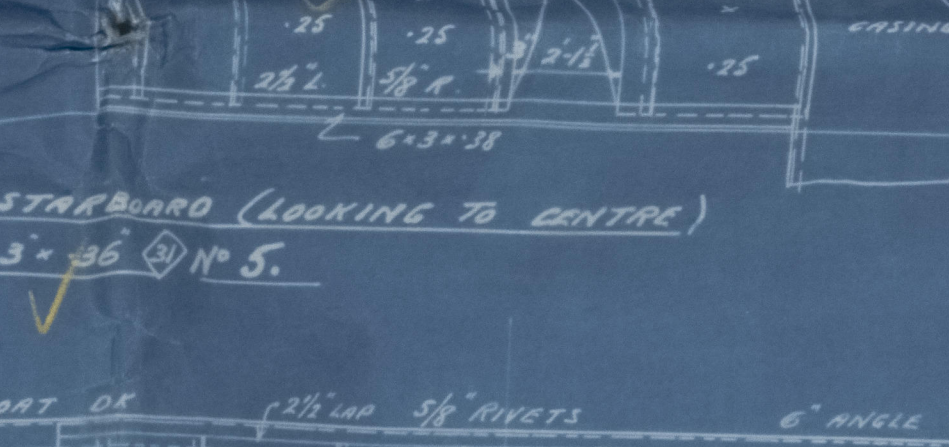
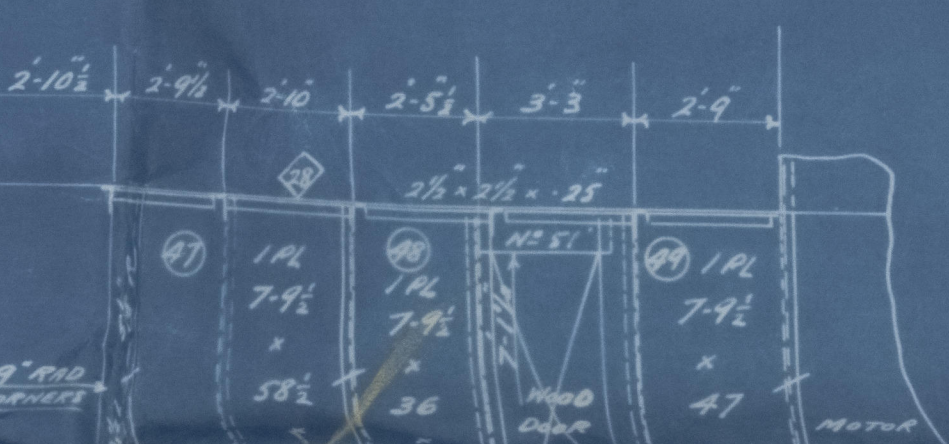
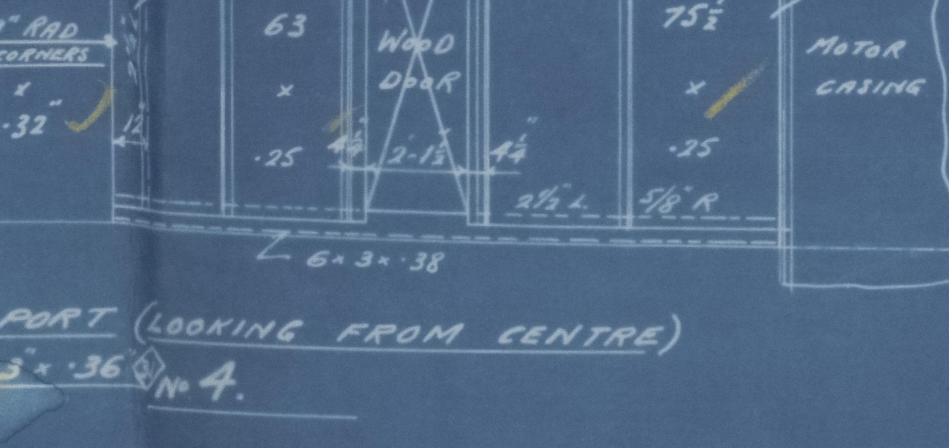
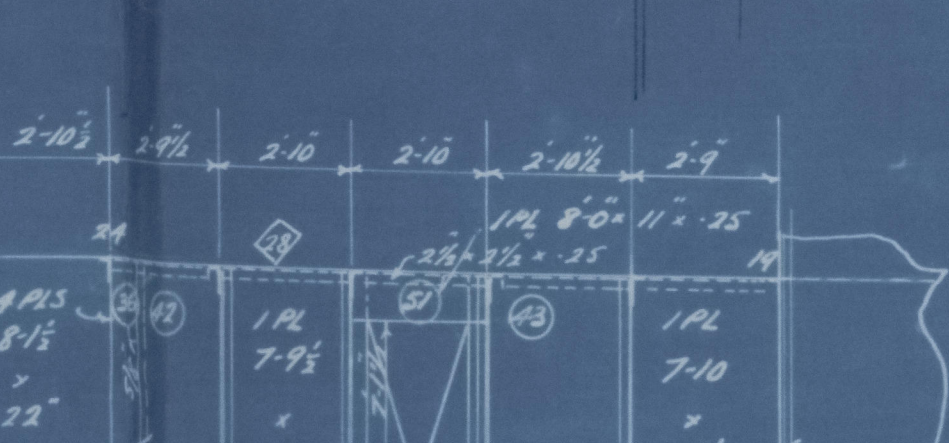
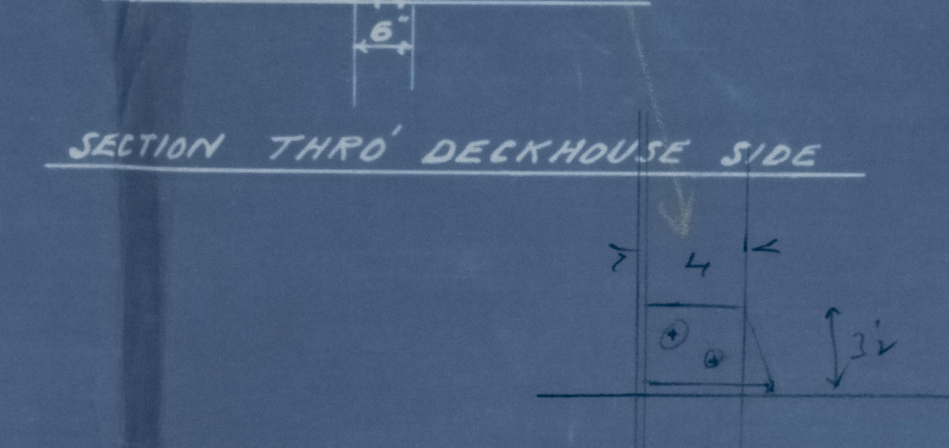
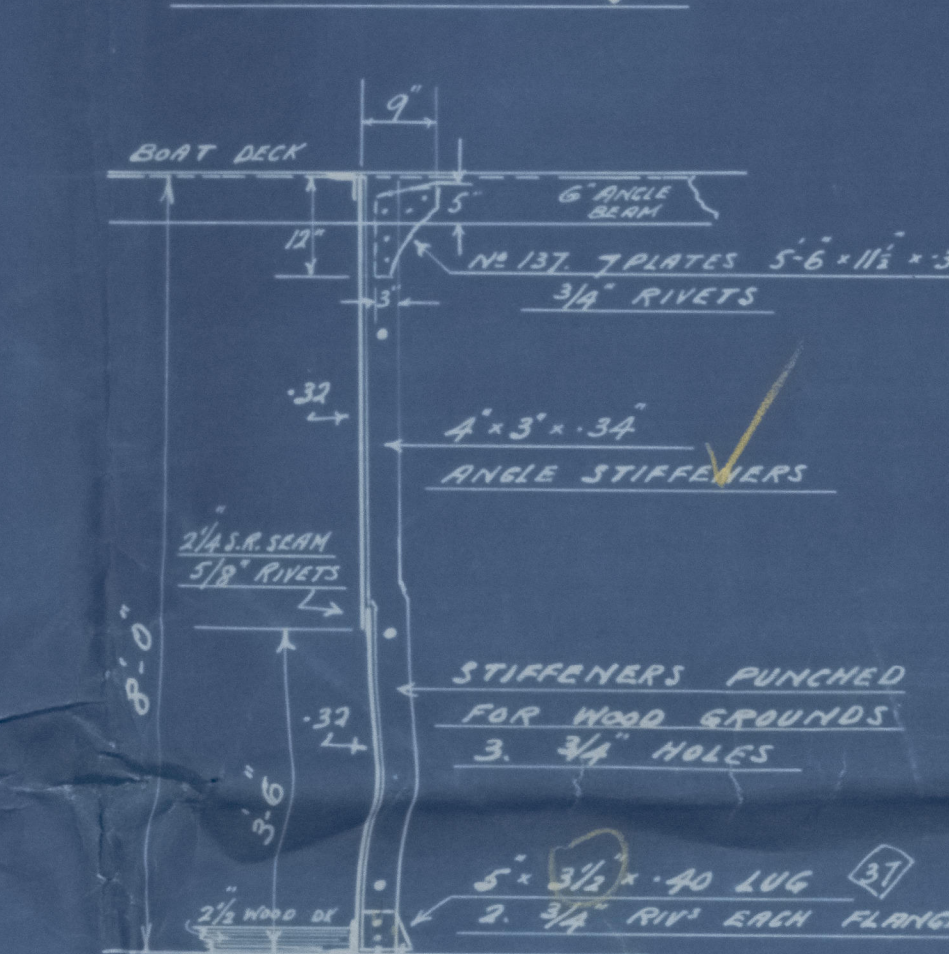
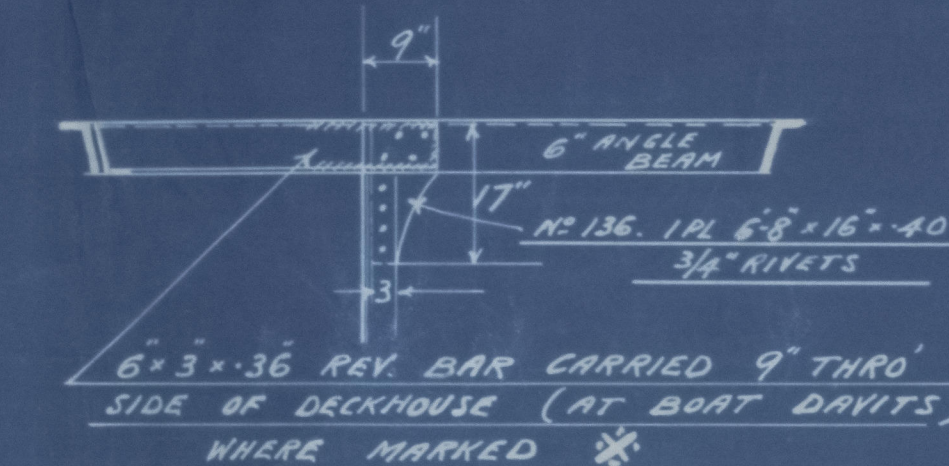
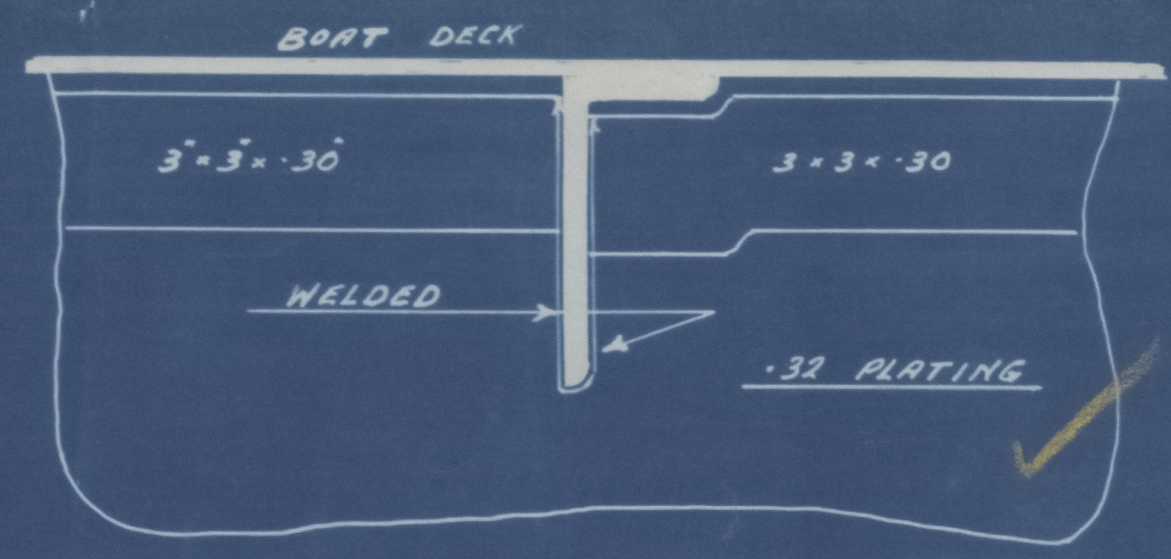
No. 933 - 934.
BRIDGE DECKHOUSE.

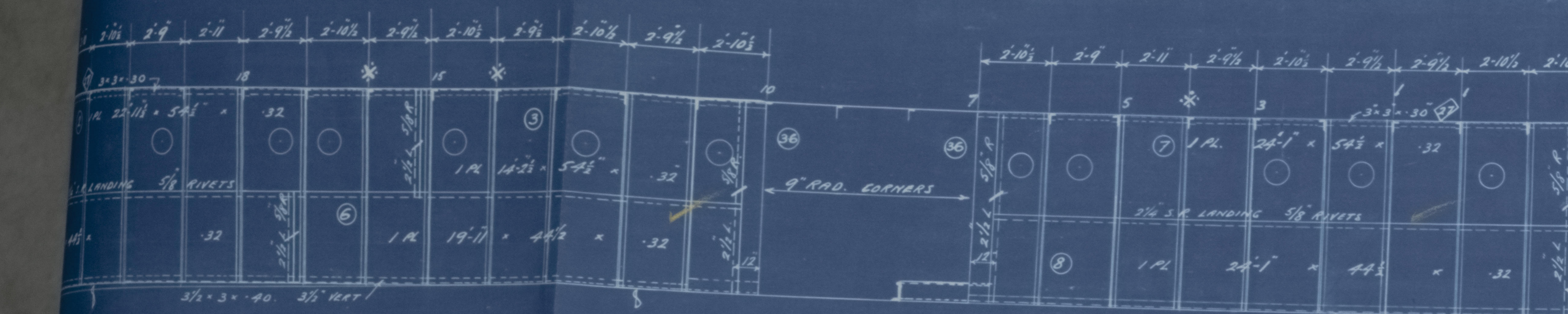
SCALE 1/8" = ONE FOOT

MATERIAL IN 1" BODY ANGLES

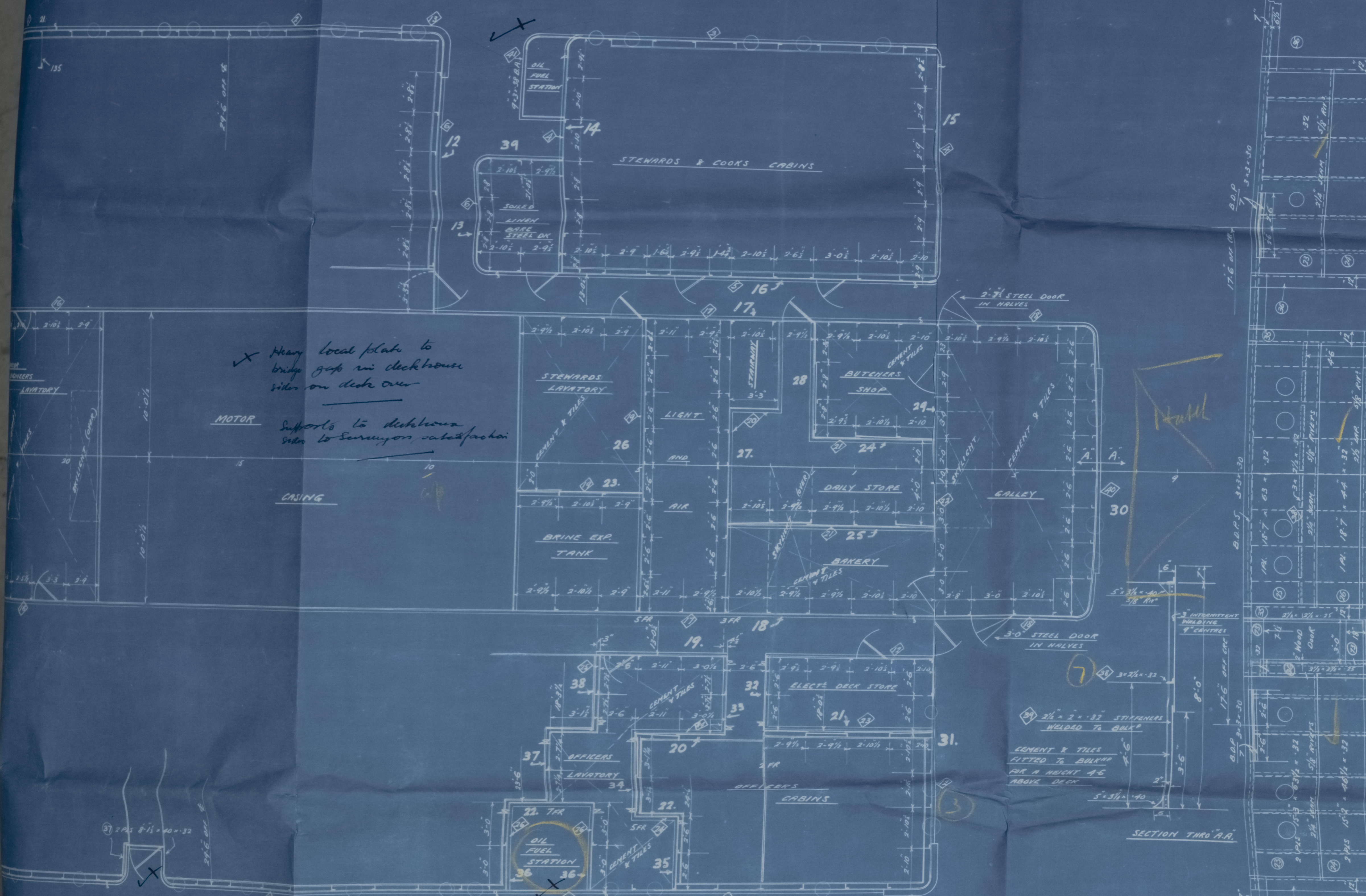
CHARGE NO. 114

DETAIL SHOWING CONNECTION OF
DECKHOUSE TO 6" x 3" x 36" ANGLE BEAMS
SCALE 3" = ONE FOOT



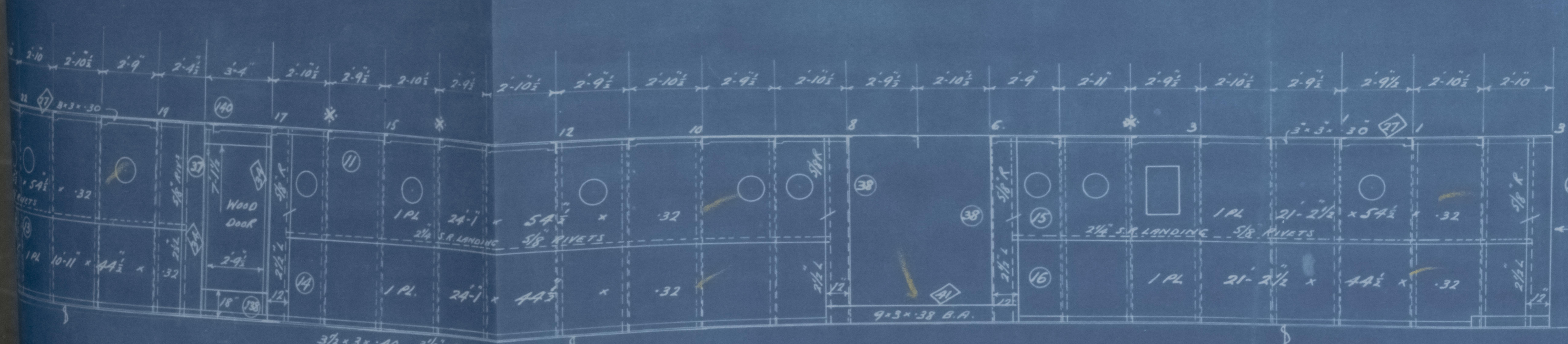


ELEVATION 29'-6" OFF CENTRE TO PORT (LOOKING FROM CENTRE)
ANGLE STIFFENERS 4'-3" x 3'

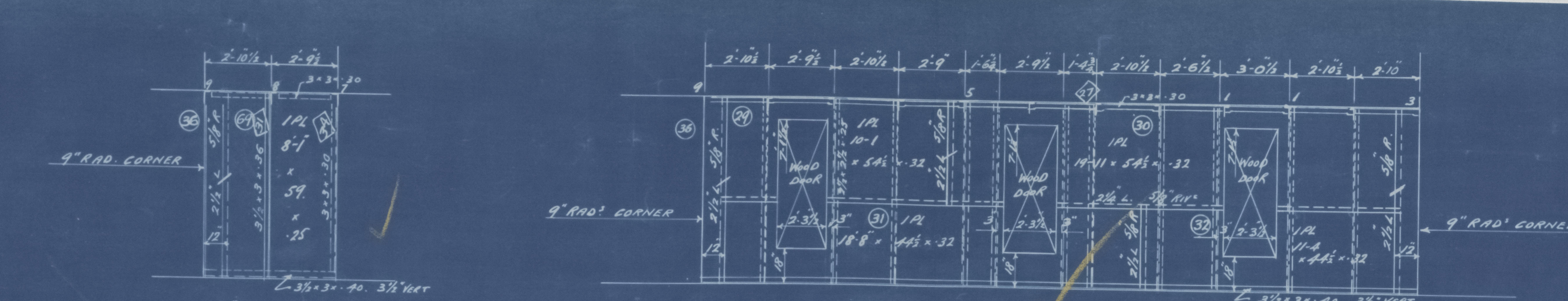


Many local plates to
be put in deckhouse
between deck one

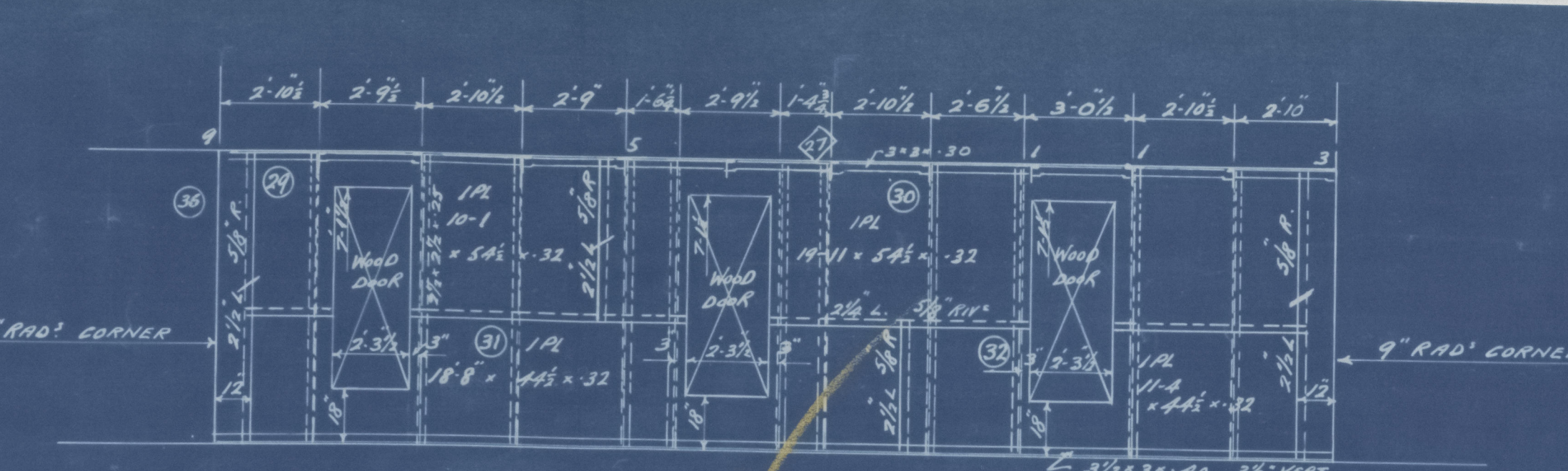
MOTOR supports to deckhouse
between deck one and two



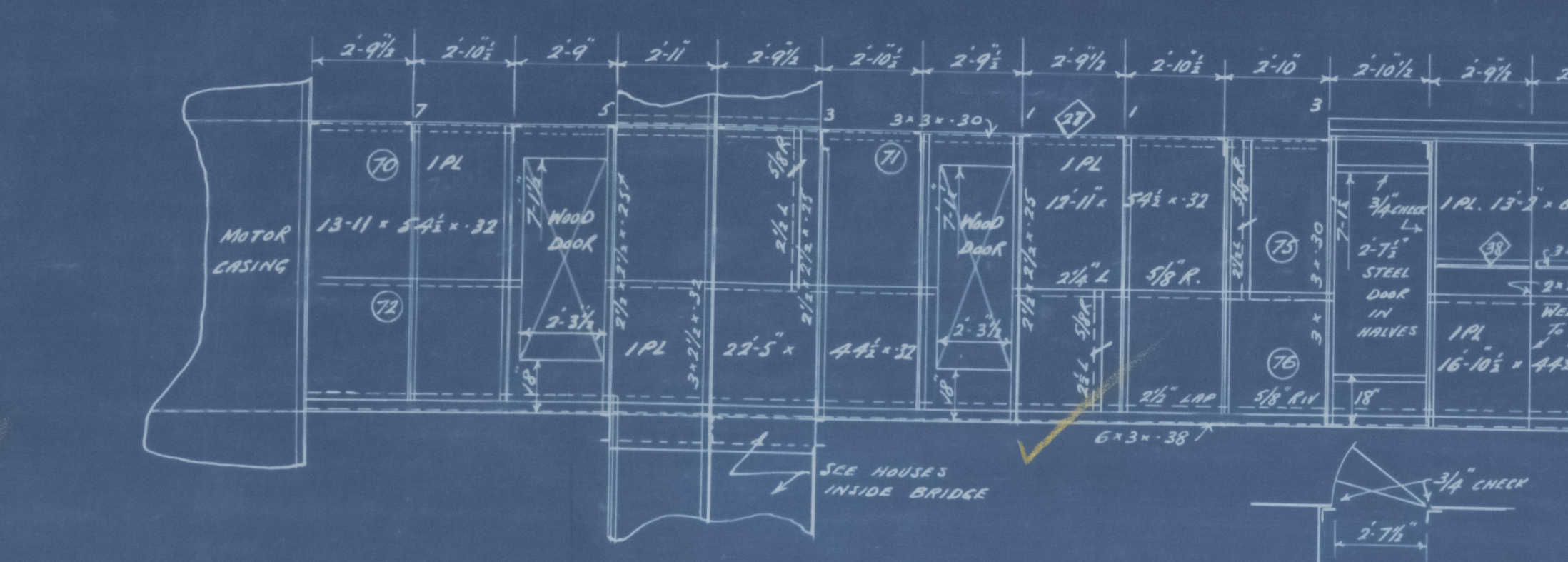
ELEVATION 29'-6" OFF CENTRE TO STARBOARD (LOOKING TO CENTRE)
ANGLE STIFFENERS 4'-3" x 3'



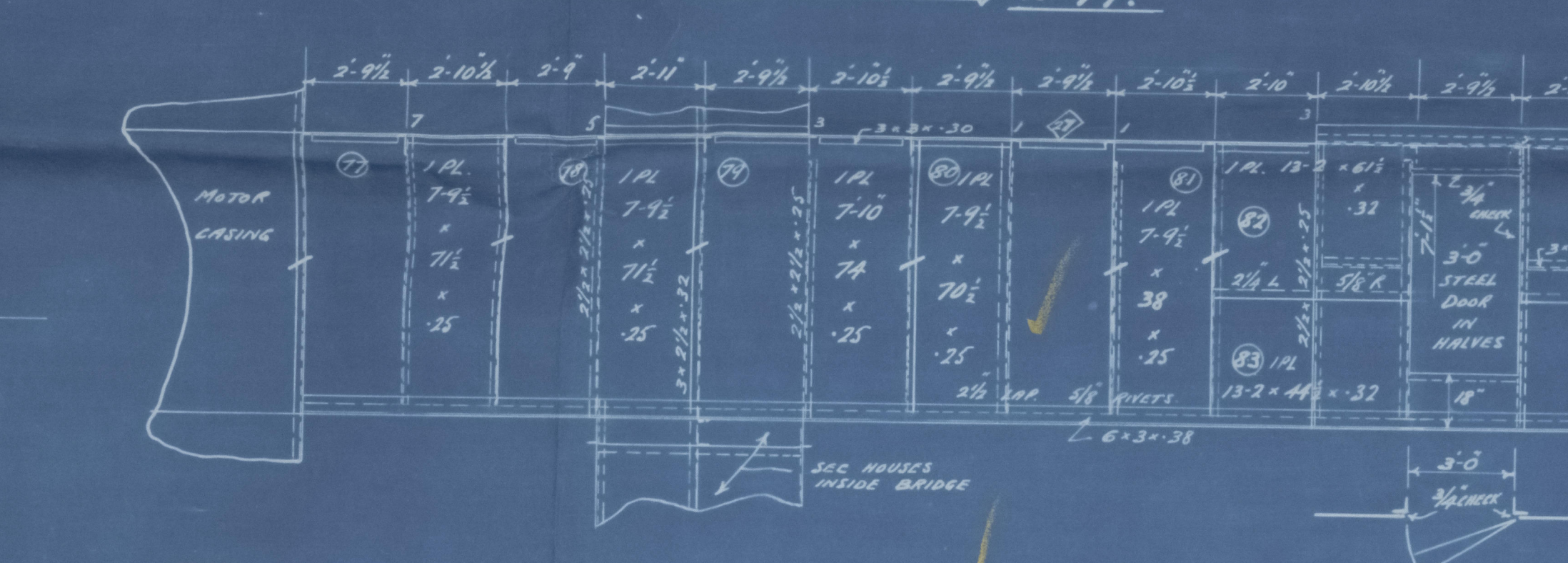
ELEVATION 21'-0" TO PORT
LOOKING FROM CENTRE
N° 39.



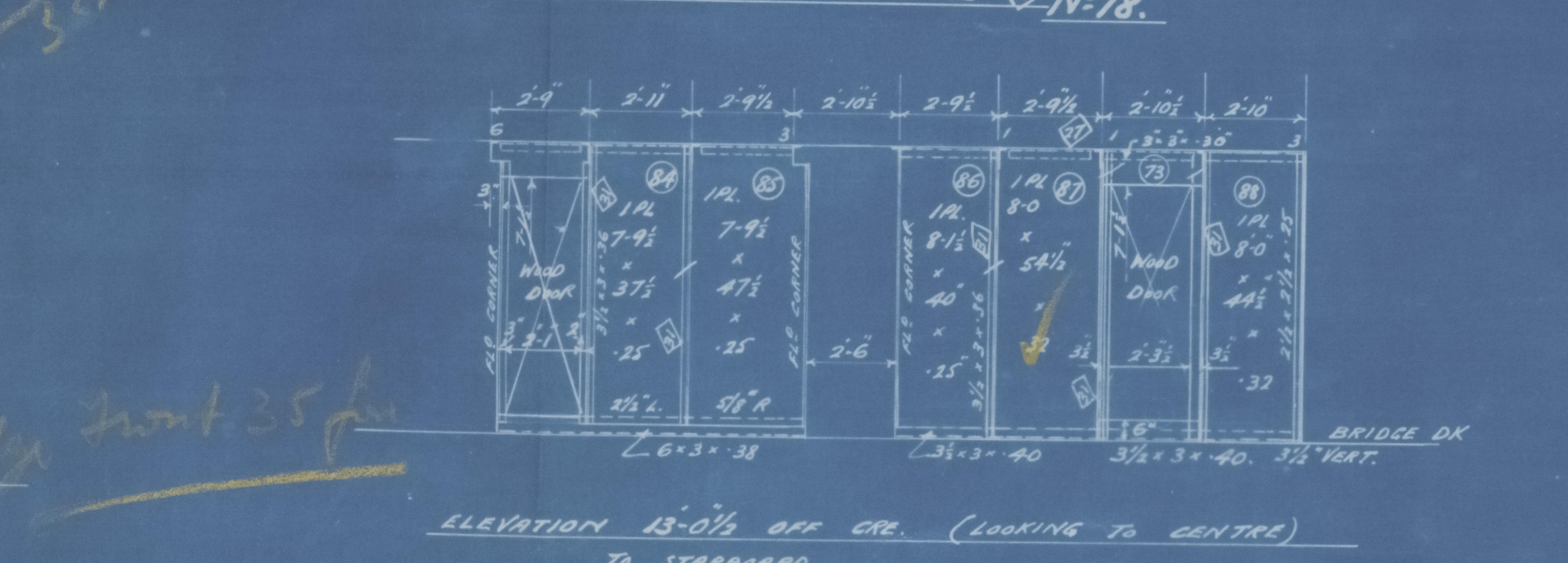
ELEVATION 15'-0" OFF CENTRE TO PORT (LOOKING FROM CENTRE)
ANGLE STIFFENERS 3'-1" x 3'-6" N° 16.



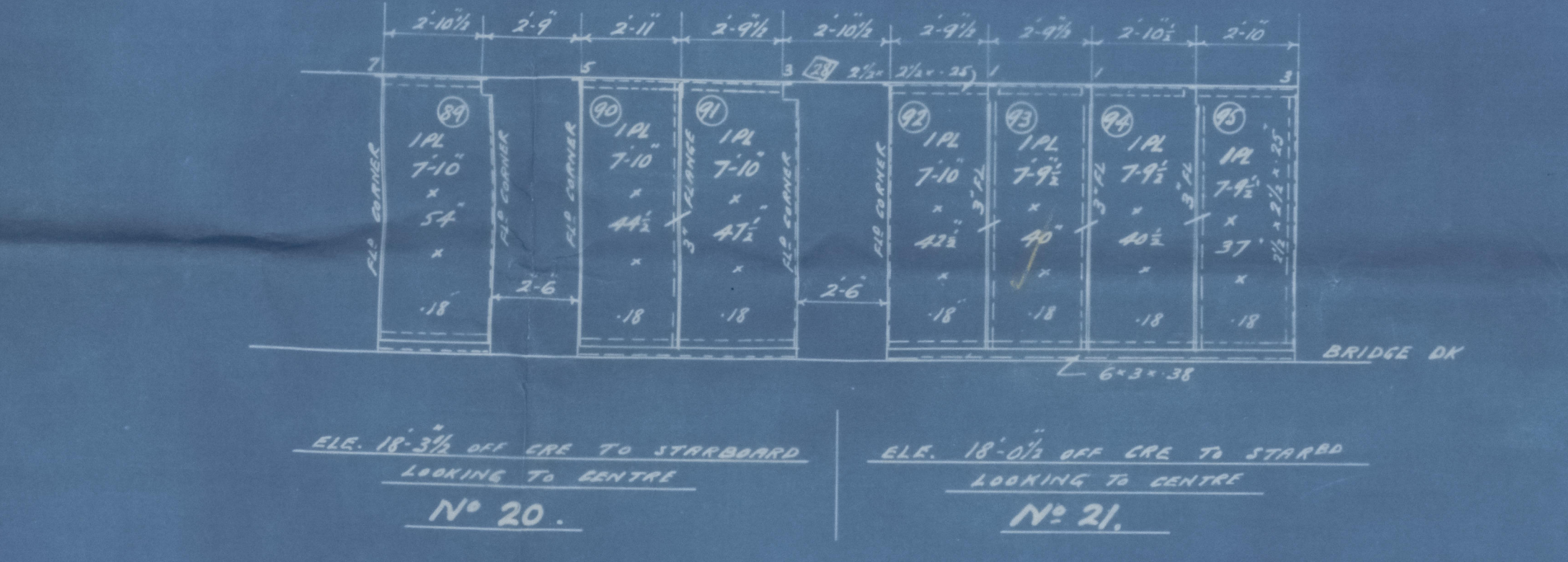
ELEVATION 10'-0" OFF CENTRE TO PORT (LOOKING FROM CENTRE)
ANGLE STIFFENERS 3'-1" x 3'-6" N° 17.



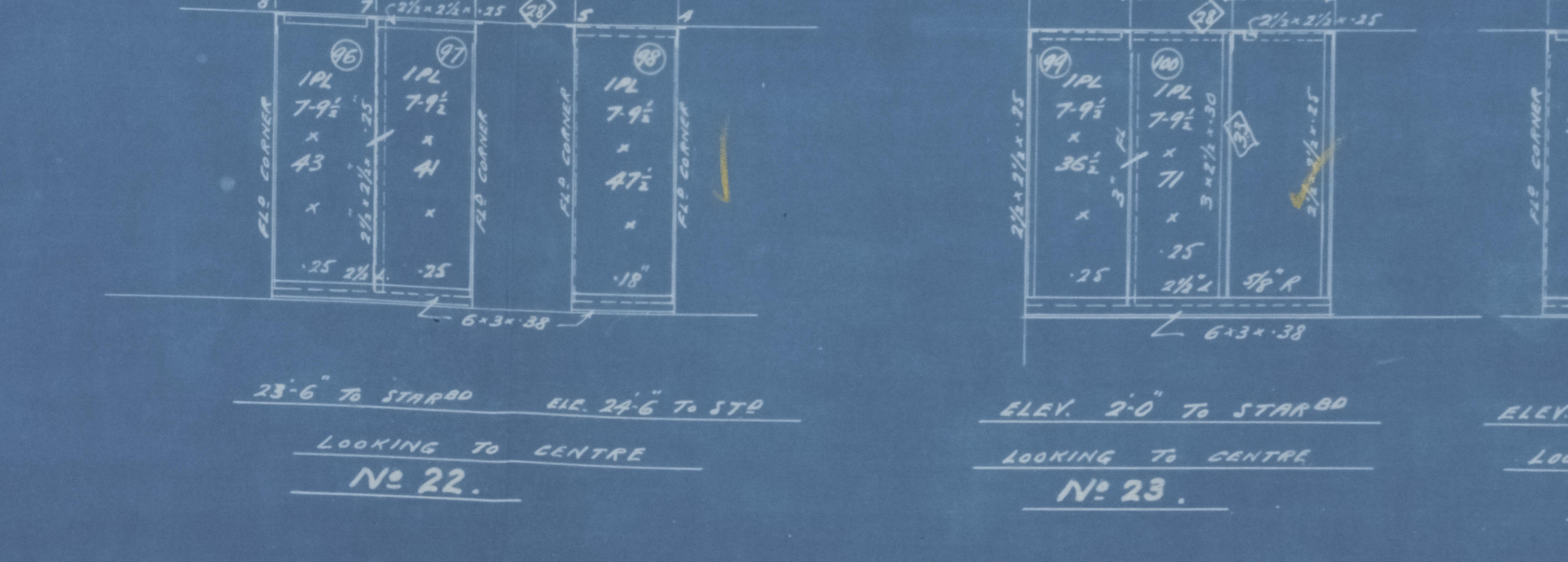
ELEVATION 10'-0" OFF CENTRE TO STARBOARD (LOOKING TO CENTRE)
ANGLE STIFFENERS 3'-1" x 3'-6" N° 18.



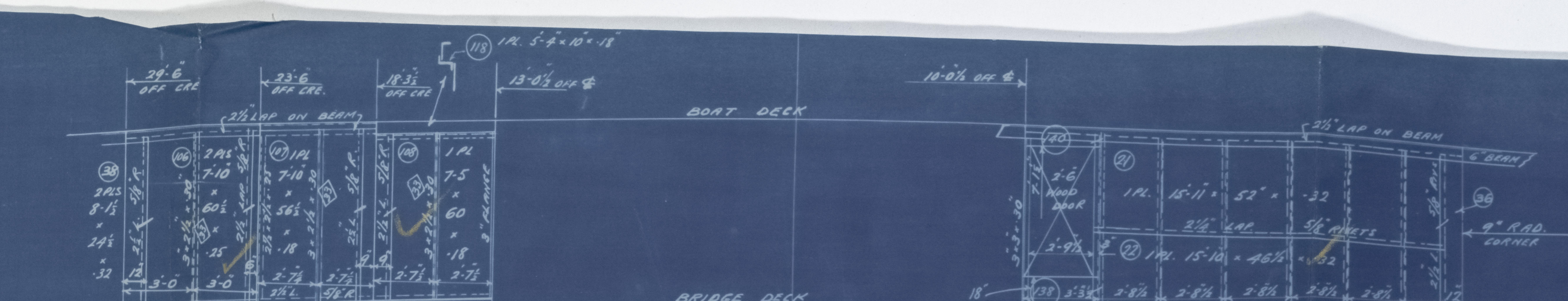
ELEVATION 15'-0" OFF CENTRE TO STARBOARD (LOOKING TO CENTRE)
N° 19.



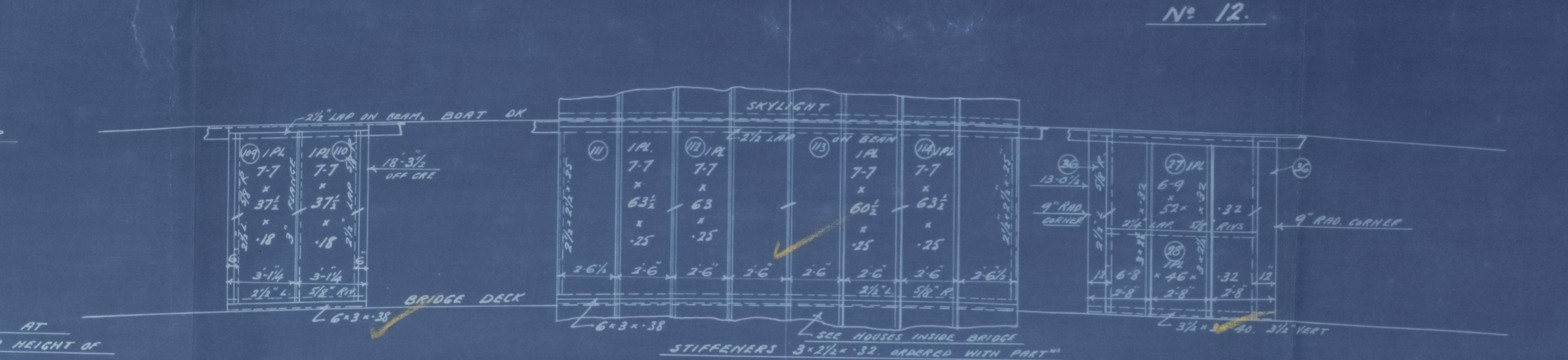
ELEVATION 15'-0" OFF CENTRE TO STARBOARD (LOOKING TO CENTRE)
N° 20.



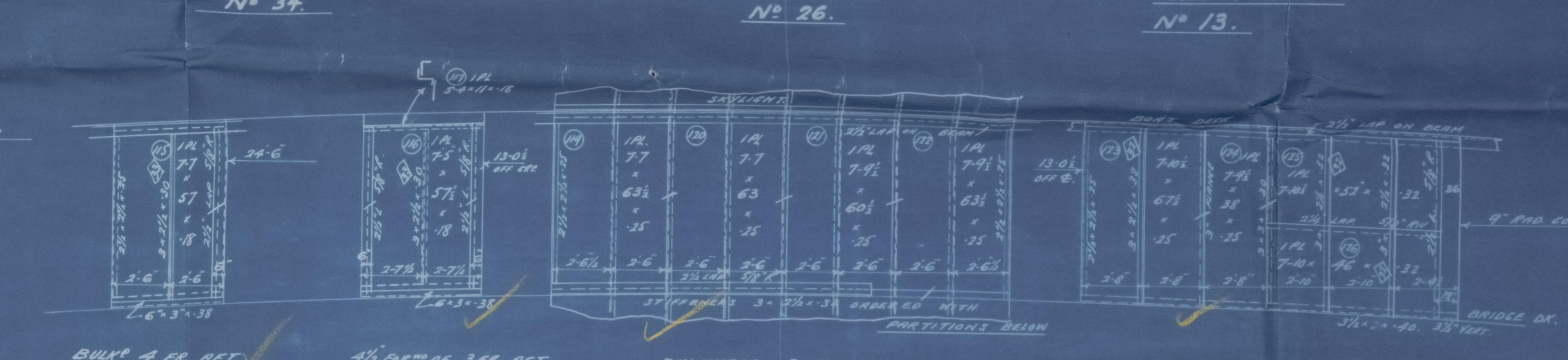
ELEVATION 15'-0" OFF CENTRE TO STARBOARD (LOOKING TO CENTRE)
N° 21.



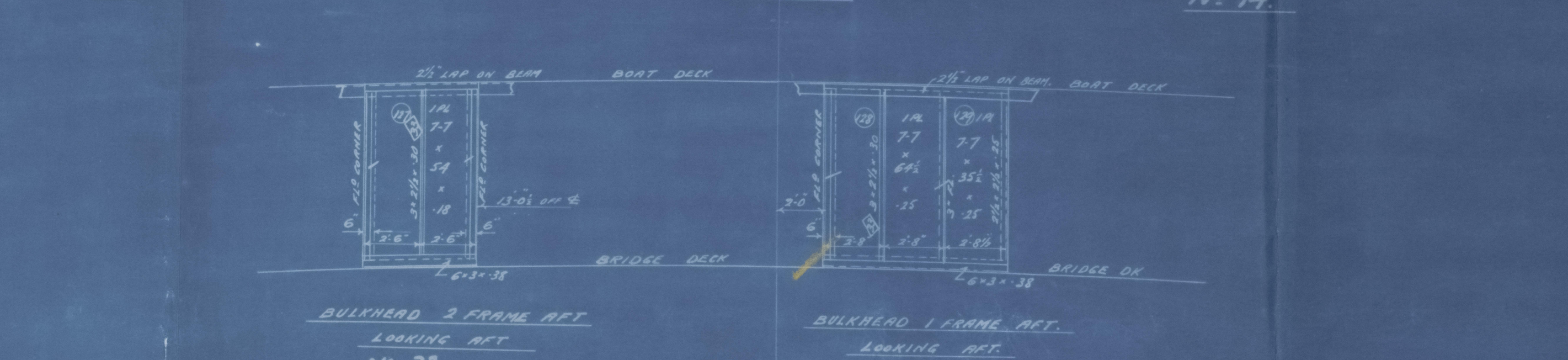
ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.



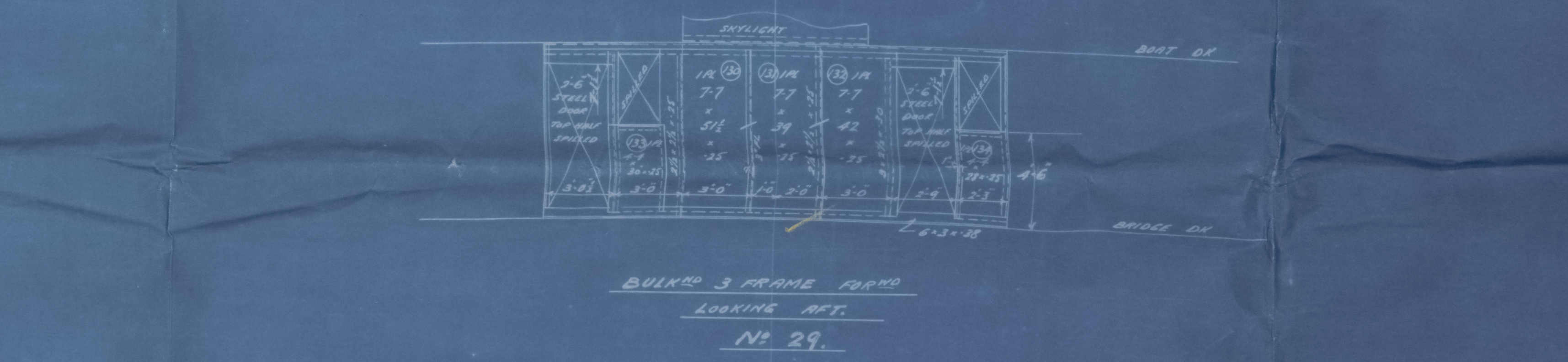
ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.



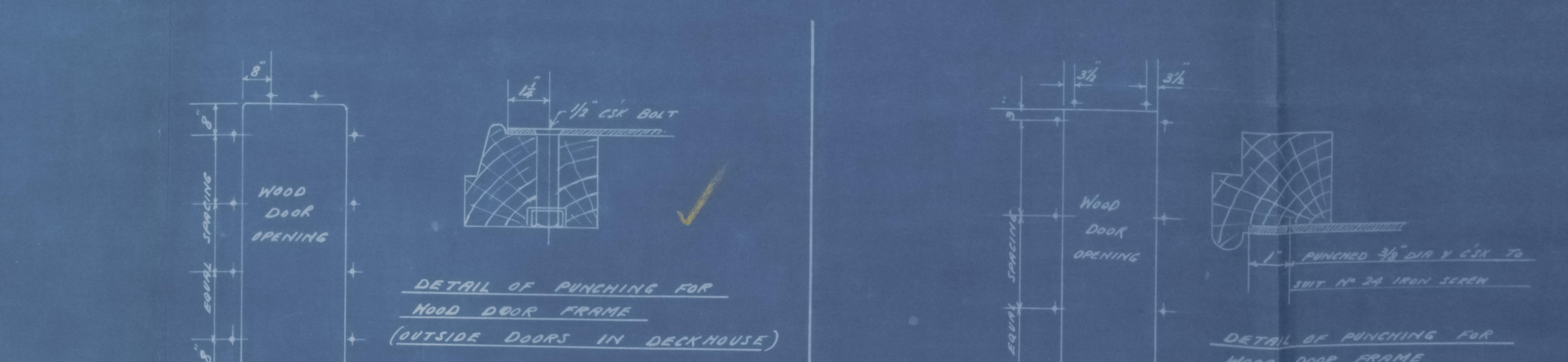
ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.



ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.



ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.



ANGLE 8' x 8' RT. 7' x 8' RT. 3' x 8' RT. 12' x 8' RT.
N° 36. N° 37. N° 38.

NO.	LENGTH	SIDE	DESCRIPTION	ANGLE
1	24'-0"	25'-0" x 40'	PORTWATER	ANGLE
2	1	27'-0"	"	"
3	1	28'-3"	"	"
4	1	33'-0"	"	"
5	1	28'-6"	"	"
6	1	33'-6"	"	"
7	1	33'-6"	"	"
8	1	38'-0"	"	"
9	1	28'-0"	"	"
10	1	35'-0"	"	"
11	1	18'-0"	"	"
12	1	21'-0"	"	"
13	1	28'-0"	6'-0" x 40'	"
14	1	31'-6"	6'-0" x 38'	"
15	1	34'-6"	"	"
16	2	32'-0"	"	"
17	2	32'-0"	"	"
18	1	32'-0"	"	"
19	1	28'-0"	"	"
20	1	24'-0"	"	"
21	1	32'-0"	"	"
22	1	20'-0"	"	"
23	1	16'-0"	"	"
24	1	26'-6"	"	"
25	1	24'-0"	"	"
26	1	18'-0"	"	"
27	1	30'-0"	25'-0" x 30'	25' BULKHEAD RT. SIDE
28	1	30'-0"	25'-0" x 30'	25' BULKHEAD RT. SIDE
29	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
30	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
31	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
32	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
33	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
34	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
35	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
36	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
37	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
38	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
39	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
40	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
41	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
42	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
43	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE

NO.	LENGTH	SIDE	DESCRIPTION	ANGLE
1	24'-0"	25'-0" x 40'	PORTWATER	ANGLE
2	1	27'-0"	"	"
3	1	28'-3"	"	"
4	1	33'-0"	"	"
5	1	28'-6"	"	"
6	1	33'-6"	"	"
7	1	33'-6"	"	"
8	1	38'-0"	"	"
9	1	28'-0"	"	"
10	1	35'-0"	"	"
11	1	18'-0"	"	"
12	1	21'-0"	"	"
13	1	28'-0"	6'-0" x 40'	"
14	1	31'-6"	6'-0" x 38'	"
15	1	34'-6"	"	"
16	2	32'-0"	"	"
17	2	32'-0"	"	"
18	1	32'-0"	"	"
19	1	28'-0"	"	"
20	1	24'-0"	"	"
21	1	32'-0"	"	"
22	1	20'-0"	"	"
23	1	16'-0"	"	"
24	1	26'-6"	"	"
25	1	24'-0"	"	"
26	1	18'-0"	"	"
27	1	30'-0"	25'-0" x 30'	25' BULKHEAD RT. SIDE
28	1	30'-0"	25'-0" x 30'	25' BULKHEAD RT. SIDE
29	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
30	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
31	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
32	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
33	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
34	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
35	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
36	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
37	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
38	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
39	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
40	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
41	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
42	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE
43	1	18'-0"	6'-0" x 36'	25' BULKHEAD RT. SIDE

DETAIL OF PINNING FOR
WOOD DOOR FRAME
(OUTSIDE DOORS IN DECKHOUSE)

DETAIL OF PINNING FOR
WOOD DOOR FRAME
(IN PARTITION BULKHEADS)



"New Zealand Star"

Harland & Wolff

933 / 4

Decks.

1 B 257

(5)

933 / 4

Imperial Star



IMPERIAL STAR' Belm 36

'NEW ZEALAND STAR'

PLANS TRANSFERRED
TO SISTER VESSEL

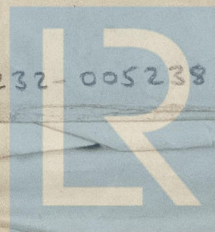
934

"New Zealand Star"

26.19
9.6
26.19

39.64
9.84
30.1
26.1
2.5

005232-005238-0136



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Nos 933-4.

515'-0" x 70'-0" x 45'-4 1/2"

PLAN OF DECKS.

SCALE 1/8" = 1'-0"

MODIFICATIONS IN BLACK ARE
FOR SHIP AS BUILT.

OWNERS INCREASE TO SHELTER DECK & BRIDGE DECK
PLATING THICKNESS AS SHOWN.

SHELTER DECK.

BRIDGE DECK.

FORECASTLE DECK.

SHELTER DECK.

UPPER DECK.

UPPER DECK.

MAIN DECK.

MAIN DECK.

LOWER DECK.

TUNNEL TOP.

SECTION THIRD OIL FUEL TANKS.
SHOWING METHOD OF PLATING.
SCALE 1/8" = 1'-0"

SECTIONS THIRD MATCH SIDES.
SCALE 1/8" = 1'-0"

TWEEN DECKS UNINSULATED.

TWEEN DECKS INSULATED.

METHOD OF CONNECTING STRINGER PLATE TO SHELL IN WAY OF
TWEEN DECKS.
SCALE 1/8" = 1'-0"

THE REQUIREMENT FOR THE COVER AND
ELECTRIC ARC WELDING TONGS, GUARDED WITH.

933 — "IMPERIAL STAR"
934 — "NEW ZEALAND STAR"

Harland & Wolff

933/4

Midship Section

①

IMPERIAL STAR' Bel 11436
'NEW ZEALAND STAR'

PLANS TRANSFERRED
TO SISTER VESSEL



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NOS 933 & 934. MIDSHIP SECTION.

SCALE $\frac{1}{2}$ " = ONE FOOT.

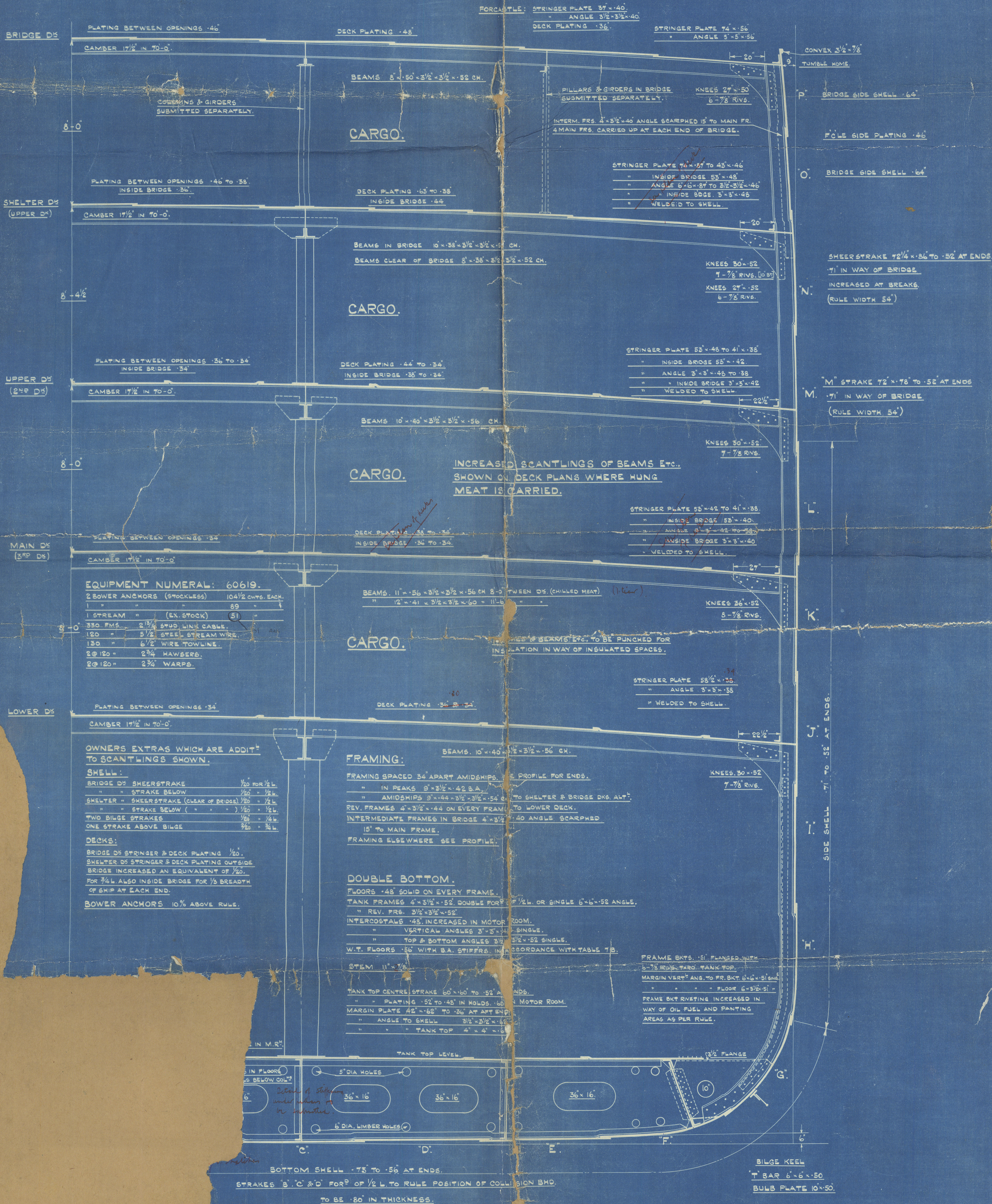
DIMENSIONS. - 515'-0" B.P. x 70'-0" MLD. x 43'-4 $\frac{1}{2}$ " MLD. TO UPPER D^K (SHELTER D^K).

TO CLASS 100 A.I. WITH FREEBOARD.

DRAFT. CORRESPONDS TO A COMPLETE SUPERSTRUCTURE VESSEL HAVING A TONNAGE OPENING.

NUMERALS

D	(43'-4 $\frac{1}{2}$ " - 8'-4 $\frac{1}{2}$ " + 8'-0")	43.00
L x D	(515 x 43.00)	22145
L x (B+D)	515 x (70 + 43)	58195
L/D	$\frac{515}{43-4\frac{1}{2}}$ & $\frac{515}{51-4\frac{1}{2}}$	11.87 & 10.85
d		14.96



Harland & Wolff

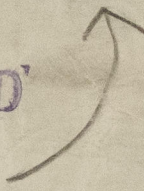
933/4

Stem frame & boss arms.

(6)

'IMPERIAL STAR'
'NEW ZEALAND STAR'

PLANS TRANSFERRED
TO SISTER VESSEL



79-8.

30-7

2196
9-9

2116
8-8

26-3



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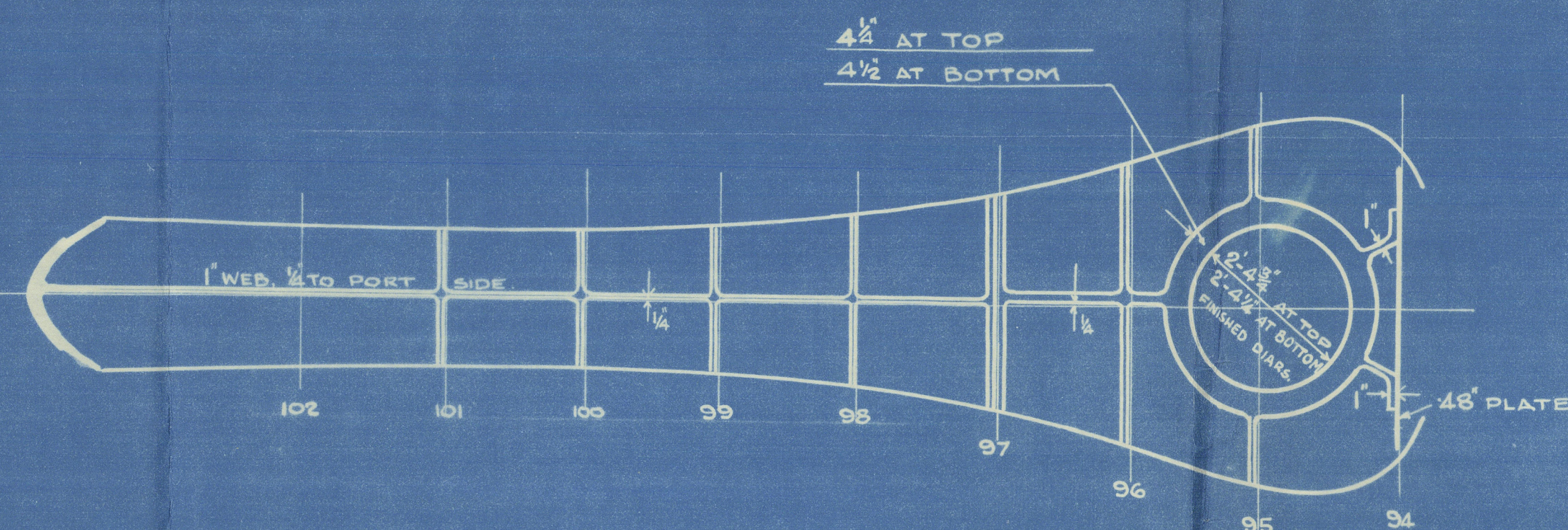
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21/1/23

N^{os} 933 & 934 STERNFRAME & BOSS ARMS

SCALE 1/2" = 1 FOOT

DIA. OF TAIL SHAFT - 17 3/4"



TOP OF TRUNK TO BE SMOOTH
TURNED AT RIGHT ANGLES TO
CR LINE OF RUDDER HEAD

NOTES

HOLES TO BE DRILLED 1/8" LARGER THAN DIA. OF
RIVET SHOWN.
GUDGEONS BORED FOR PINTLES & LIGNUM VITE
BUSHING.

MATERIAL

STERNFRAME & BOSS ARMS CAST STEEL
PINTLES FORGED STEEL
TO PASS LLOYD'S TESTS & REQUIREMENTS

PARTICULARS OF SHAFTING

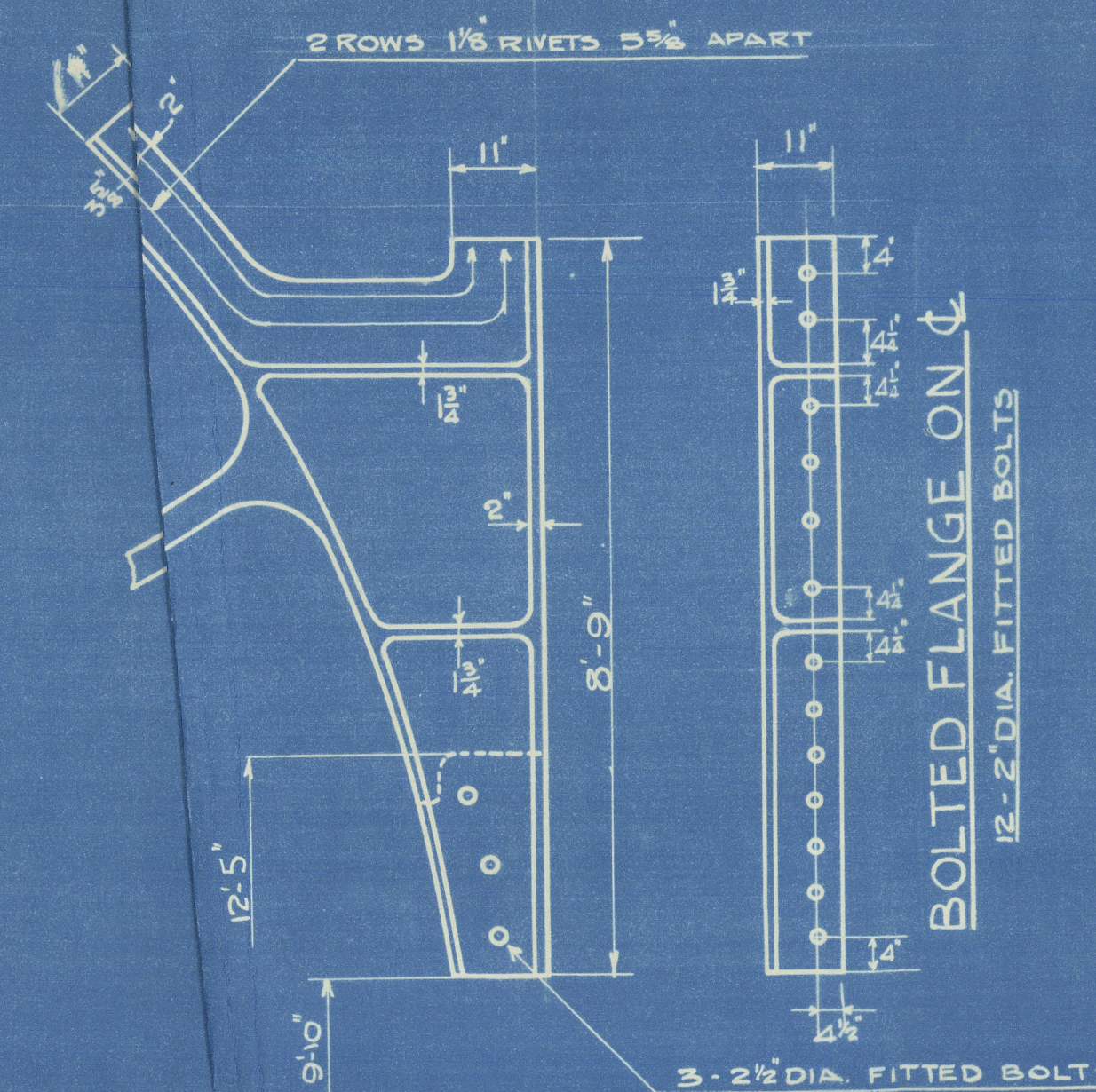
HEIGHT OF ϕ OF SHAFT AT 10' 4" AFT OF FR. 88 FT. 8'-0"
HALF BREADTH TO ϕ " " " " " " " " 9'-0"
HEIGHT TO ϕ OF " " " " " " " " 9'-6"
HALF BREADTH TO ϕ " " " " " " " " 12'-0"
RAKE PER FOOT DOWN FROM PROPELLER. -0.07"
RAKE " " " " " " " " 162.0"

PARTS TO BE MACHINED

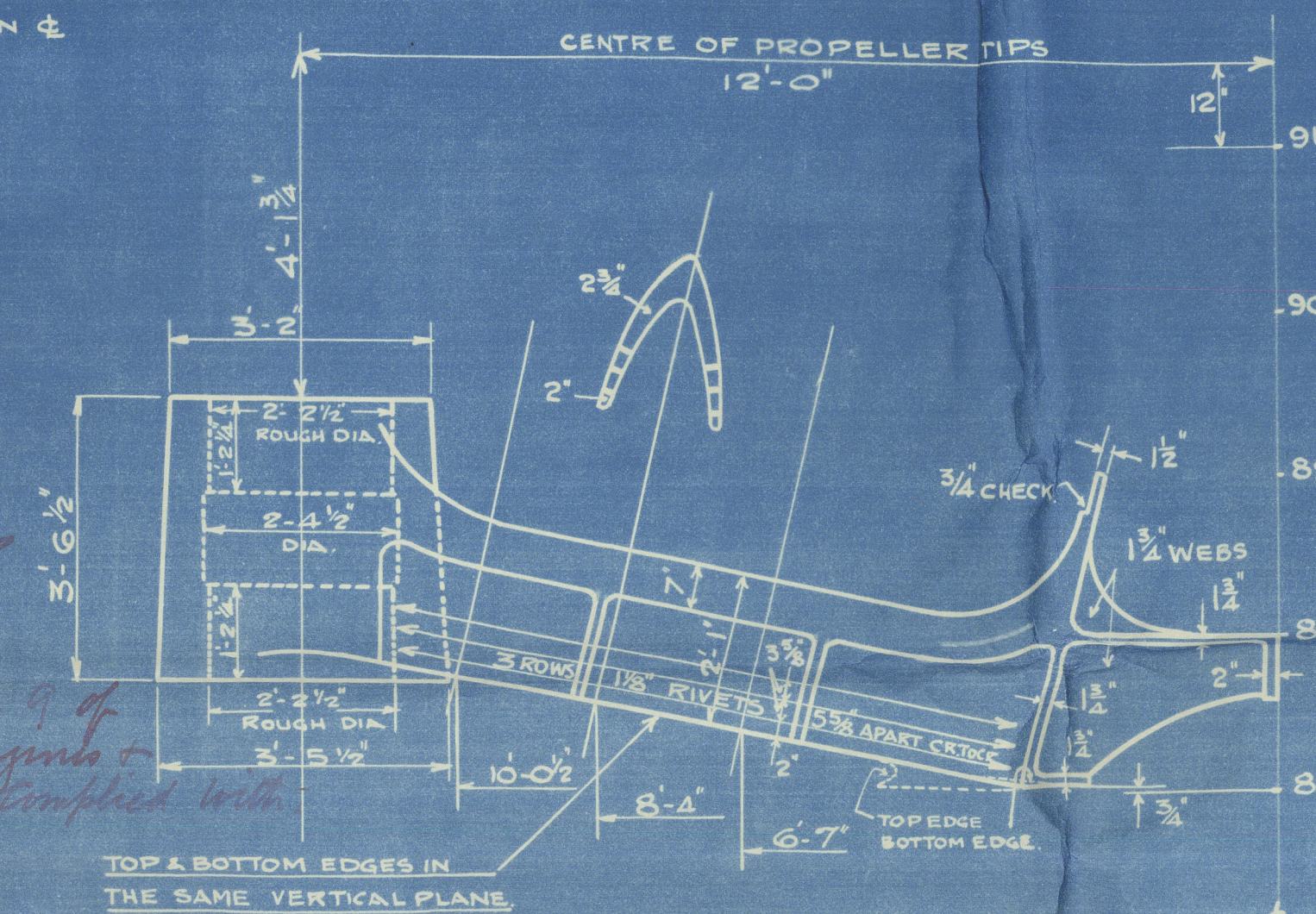
THE FOLLOWING PARTS (TINTED RED) TO BE MACHINED.
SURFACES IN CONTACT AT COUPLINGS, FRAMES 88, 91, 96 AFT
INSIDE OF RUDDER TRUNK

TOP OF
BOLTED FLANGES OF BOSS BRACKET ON ϕ
PINTLES
TOP OF GUDGEONS.
HARD STEEL BEARING CUPS.

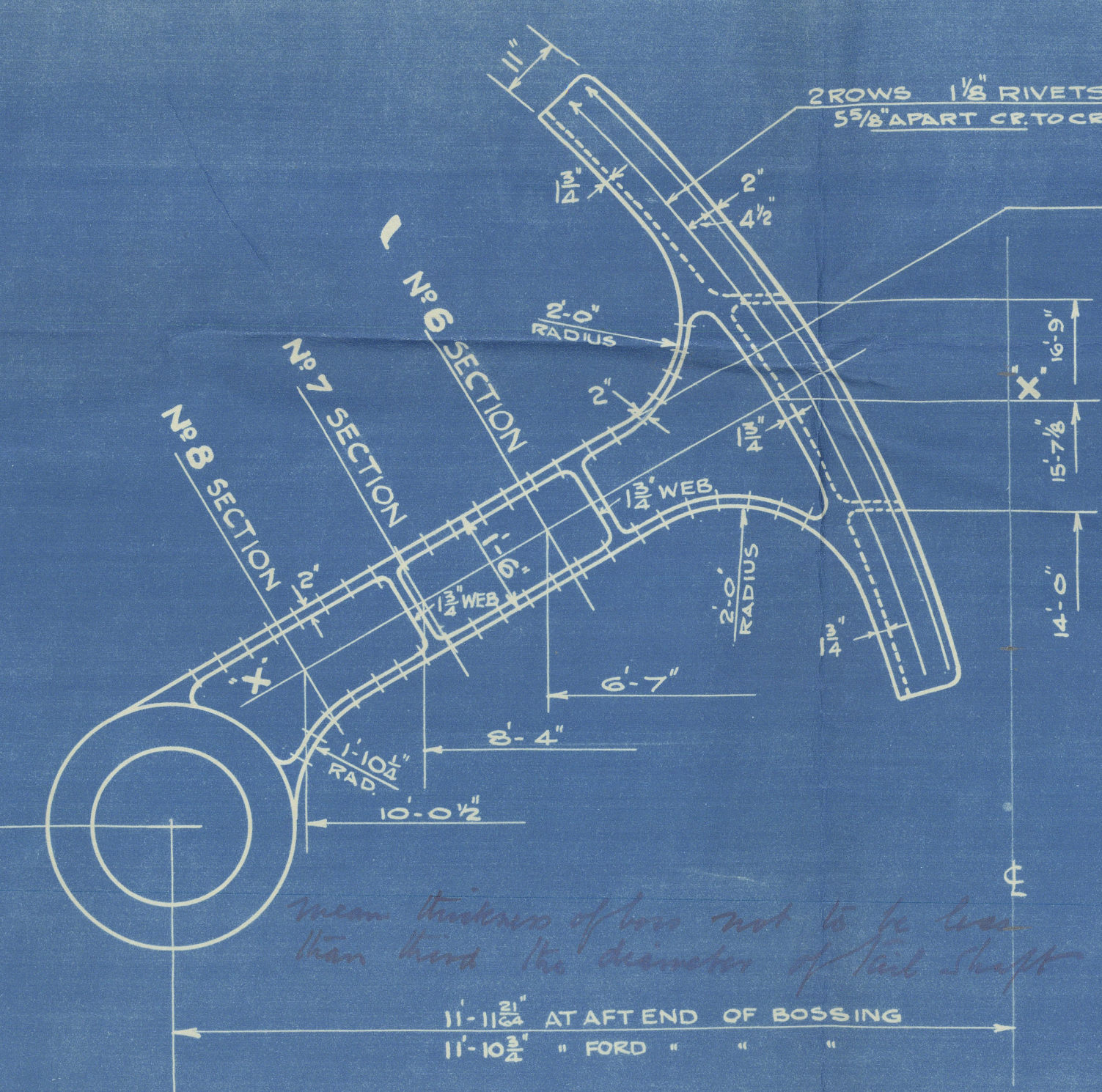
*Done by Gudgeons
End of Bossing*



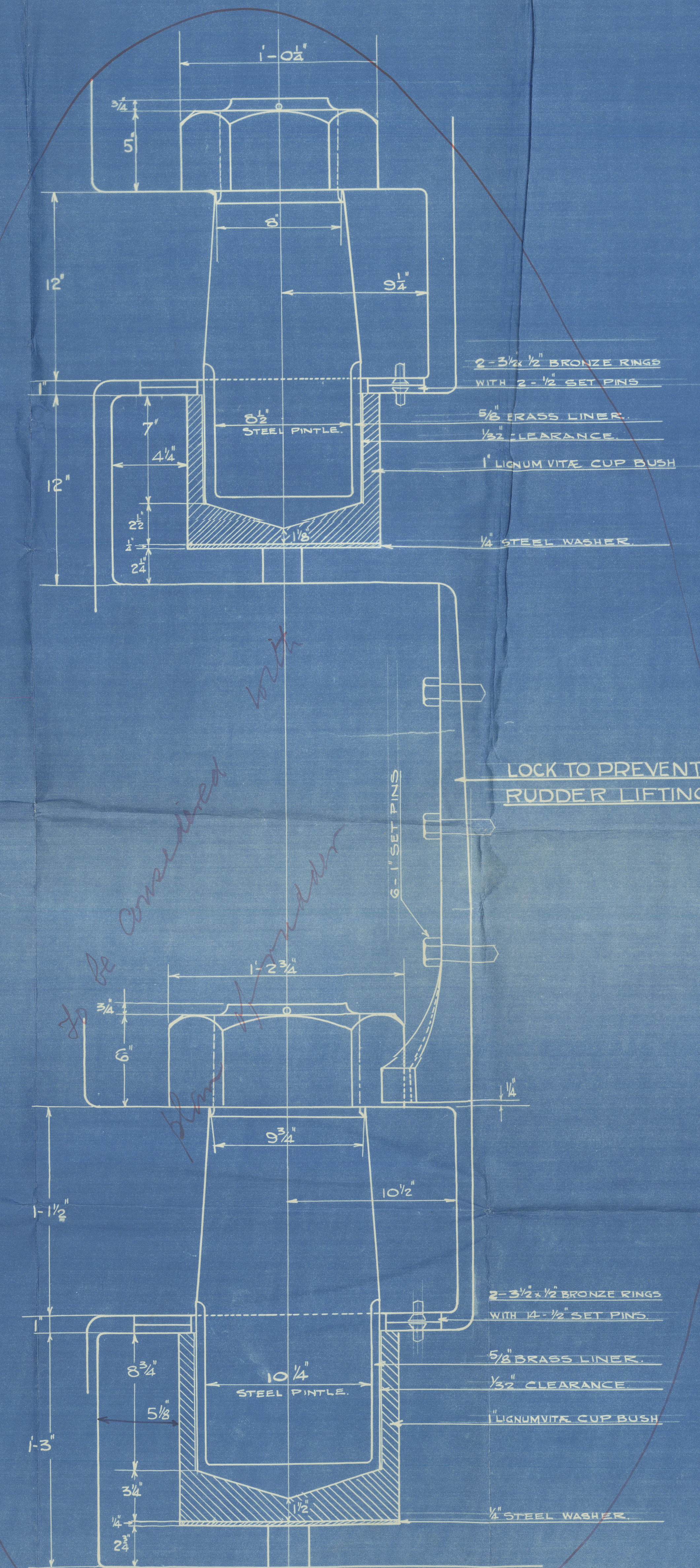
SECTION AT FRAME 88



SECTION AT XX'



SECTION 3/4" AFT OF FRAME 87



21. 11. 20



933-4-9-95748

Stern Frame & Boss boards.

(7.)

SYDNEY STAR N/KENT

'IMPERIAL STAR' *

'NEW ZEALAND STAR' *

'AUSTRALIA STAR'

WS1009
WS1010

PLANS TRANSFERRED
TO SISTER VESSEL



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005232-005238-0132

N° 939
N°s 933 & 934 +957+958
STERNFRAME & BOSS ARMS

SCALES $\frac{1}{2}'' = 1 \text{ FOOT}$
 $3' = 1 \text{ FOOT}$

TOP OF TRUNK TO BE SMOOTH
TURNED AT RIGHT ANGLES TO
CR. LINE OF RUDDER HEAD.

MATERIAL

PARTICULARS OF SHAFTING

HEIGHT OF ϕ OF SHAFT AT 10'0" AFT OF FR. SAFT.	8'-9"
HALF BREADTH TO ϕ " " " "	9'-0"
HEIGHT TO ϕ OF "PROPELLER TIPS (6'-0" FORD OF AFT)	9'-6"
HALF BREADTH TO ϕ " " " "	12'-0"
RAKE PER FOOT DOWN FROM PROPELLER	0.007
RAKE " " INBOARD " "	162.8

PARTS TO BE MACHINED

THE FOLLOWING PARTS (TINTED RED) TO BE MACHINED:
SURFACES IN CONTACT AT COUPLINGS, FRAMES 88, 91, 96 AFT
INSIDE OF RUDDER TRUNK
TOP " " "

SECTION AT FRAME 88

PLAN AT LOWER PINTLE
SHOWING LOCK TO PREVENT RUDDER
LIFTING

SECTION AT XX

SECTION 3/4" AFT OF FRAME 87

933-4-9

Rudder Plan.



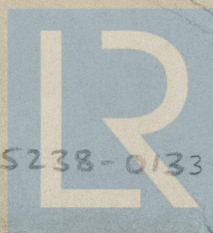
(30)

'IMPERIAL STAR' *
'NEW ZEALAND STAR'
'AUSTRALIA STAR' ^

PLANS TRANSFERRED
TO SISTER VESSEL

W/S 73

73



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005232-005238-0133

CHARGE N° 126

PARTICULARS

TOTAL RUDDER AREA	235159. FT
RUDDER AREA ABAFT & OF PINTLE	205 " "
SPEED OF VESSEL	16 KNOTS
MAX. ANGLE OF HELM	40 DEGREES
AREA COEFFICIENT	$\frac{25 \times 235}{16}$ 65

NOTE 5:
PLATES ANGLES, SUPPLIED & FITTED BY SHIPBUILDER
COUPLING BOLTS AND NUTS TOGETHER WITH KEYS KEYSINUS ALSO ACCESS PLATES & W. BRONZE BEARING RING TO BE SUPPLIED & FITTED COMPLETE BY CONTRACTOR.
FORCED ASSEMBLY ENTERED WITH W. BRONZE BEARING RING TO BE SUPPLIED BY CONTRACTOR.
SPLIT RING TO BE SUPPLIED BY CONTRACTOR.
RUDDER FRAME TO BE BORED FOR PINNITS STOCK FRAME TO BE BOLTED TOGETHER WITH RING TO BE SUPPLIED BY CONTRACTOR.
ALIGNMENT BETWEEN UPPER STOCK PINNITS SPACE BETWEEN PLATES TO BE LEFT EMPTY.
W. BRONZE BEARING RING BUTT WELD COMPOSITION.
THE FOLLOWING PARTS TYPED TO BE MANUFACTURED BY CONTRACTOR:
1. COUPLING SURFACES OF COUPLINGS.
2. RUDDER STOCK & BRONZE LINER TOP & BOTTOM FRAME IN WAY OF PINITS.
3. DECKBOARD & FACE OF COUPLING IN WAY OF BOLTS.
4. RING TO BE SUPPLIED BY CONTRACTOR.
SEE ALSO KEY PLAN & PLAN OF FULL SIZE SECTIONS.

SECTION THRO' XX

DETAIL OF COUPLING

ELEVATION

PLAN

DETAIL OF ACCESS PLATE

SECTION THRO' CASTING

SENT TO OWNERS, 11/1/54.
" " MAKERS, 2/3/54.